

The Maryland Agricultural College

QUARTERLY.

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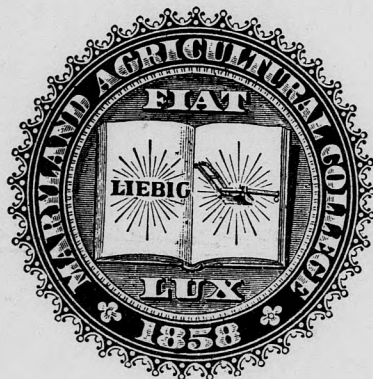
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ADDRESS

**Chemical Department, Maryland Agricultural College,
COLLEGE PARK, MD.**

ANALYSIS OF Commercial Fertilizers Sold in Maryland

BY THE CHEMICAL DEPARTMENT OF
THE MARYLAND AGRICULTURAL COLLEGE.

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The tables on the following pages are made up of the results of the analysis of fertilizers made at the College from *July, 1904, to January, 1905*, inclusive.

The majority of the samples analyzed are obtained by our sampling agents, the samples being taken while the goods are in transit, on vessels, wharves, cars, at stations, from farmers' wagons, barns, etc. It is impossible for us to analyze all the samples we collect; duplicates are generally omitted.

When a sample has been sent in by a farmer his name appears after the place of sampling. No sample is analyzed unless fully described on blanks furnished by this Department. The description is not sent in, however, till after the analysis is reported.

No samples are accepted from manufacturers or their agents under any circumstances.

The figures in the columns headed "Ammonia," "Potash" and "Phosphoric Acid" are percentages, or pounds per hundred. To get pounds per ton multiply the figures by 20. The columns headed "Found" contain the results found by analysis; those headed "Guaranteed" contain the essential part of the guarantee as stamped on the bags.

The columns headed "No." contain the respective numbers by which the samples are known in the laboratory. In writing to the Chemical Department in regard to any analysis the number should always be given. The samples are numbered consecutively on the books of the office, but are arranged alphabetically for publication, which accounts for the mixing up of the numbers.

To get "Total" phosphoric acid add the "Insoluble" and the "Available" phosphoric acid.

The "Comparative Value Found" and the "Comparative Value Guaranteed" are calculated, the former from the analysis found, the latter from the analysis guaranteed on the bags, using the following schedule:

In Mixed Fertilizer:

For Nitrogen, calculated as Ammonia.....	17 1-2 cts. per pound.
For Potash (K_2O), in forms free from muriate.....	6 cts. per pound.
For Potash (K_2O), as muriate, or Kainit.....	5 cts. per pound.
For Available Phosphoric Acid.....	5 cts. per pound.
For Insoluble Phosphoric Acid.....	2 cts. per pound.
For Insoluble Phosphoric Acid when from S. C. Rock.....	1 cts. per pound.

In Dissolved S. C. Rock:

Available Phosphoric Acid.....	4 cts. per pound.
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In Ground Bone:

For Nitrogen, calculated as Ammonia, in "Fine" Bone.....	16 cts. per pound.
For Nitrogen, calculated as Ammonia, in "Fine Medium" Bone.....	14 cts. per pound.
For Nitrogen, calculated as Ammonia, in "Medium" Bone.....	12 cts. per pound.
For Nitrogen, calculated as Ammonia, in "Coarse" Bone.....	10 cts. per pound.
For Phosphoric Acid in "Fine" Bone.....	5 cts. per pound.
For Phosphoric Acid in "Fine Medium" Bone.....	4 cts. per pound.
For Phosphoric Acid in "Medium" Bone.....	3 cts. per pound.
For Phosphoric Acid in "Coarse" Bone.....	2 cts. per pound.

In Tankage and Ground Fish:

For Nitrogen, calculated as Ammonia.....	15 cts. per pound.
For Phosphoric Acid.....	3 cts. per pound.

In using the above schedule all fertilizers containing less than one per cent. of ammonia will be given the rock valuation of four cents per pound on the available phosphoric acid.

The "comparative values" given in the table are not claimed to be the proper prices to be paid for the various fertilizers at the place of sale or use; this varies considerably, depending on the market prices of the ingredients, freight, commissions, size of order, cash or credit, etc.

Sliding-scale guarantees (the use of a maximum as well as a minimum guarantee), as "ammonia 1 to 3 per cent." is unlawful. The penalty for the first offense is \$100 fine.

It is unlawful to sell any brand of commercial fertilizer before the license for the same has been obtained from the Comptroller. When the license is paid by the manufacturer it is not necessary for his agents to obtain another license for the same brands. If, however, the manufacturer resides out of the State, and does not pay the license, each agent selling the goods, or offering the same for sale, is held responsible for the license.

No.	Name and Address of Manufacturer.	Name of Fertilizer.	Place of Sampling (and Sampler when not the College.)
13558	American Agri. Chem. Co.,	Big Crop Phosphate.....	Baltimore.....
13517	New York, N. Y. "	Dissolved Animal Bone...	Hagerstown.....
13559	" " "	Dissolved Bone.....	Bel Air.....
13450	" " "	Fine Ground Bone.....	Silver Spring.....
13530	" " "	Gem Alkaline Phosphate.	Frederick.....
13417	" " "	Gem Alkaline Phosphate.	Baltimore.....
13491	" " "	Genuine German Kainit..	Baltimore.....
13492	" " "	H. G. Dissolved Bone and Potash.	Baltimore.....
13451	" " "	Pure Ground Bone.	Whites' Ferry.
13548	" " "	S. C. Bone.....	Providence.....
13418	A. A. C. Co., (Canton)....	Bakers' Dissolved S. C. Bone.	Baltimore.....
13452	" " "	Bakers' Special Wheat, Corn and Grass Mixture.	Alesia.
13453	" " "	Harrow Brand Crop Grower.	Westminster.....
13561	" " "	Patrons' Bone Mixture...	Bel Air.....
13549	" " "	Soluble Alkaline Bone....	Snow Hill.....
13494	" " "	Soluble Bone and Potash.	Baltimore.....
13454	A. A. C. Co., (Detrick)....	Ammoniated Bone Phosphate.	Silver Spring.....
13550	" " "	Bone and Potash.....	Snow Hill.....
13551	" " "	Corn and Oats Fertilizer.	Snow Hill.....
13400	" " "	Dissolved S. C. Bone.....	Mt. Airy.....
13455	" " "	Farmers' New Method Phosphate.	Silver Spring.....
13607	" " "	Gold Eagle	Baltimore.....
13401	" " "	Imperial Compound	Mt. Airy.....

FERTILIZER ANALYSES.

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No.	NITROGEN Calculated as AMMONIA.		POTASH, K ₂ O.		PHOSPHORIC ACID.				Comparative Value per Ton Found.	Comparative Value per Ton Guaranteed.
	Found.	Guaranteed.	Found.	Guaranteed.	Insoluble.		Available.			
					Found.	Guaranteed.	Found.	Guaranteed.		
13558	.....	.....	5.02	5.00	.75	.....	8.45	8.00	\$11.93	\$11.40
13517	2.56	2.50	.....	.....	2.68	.....	12.21	12.00	22.24	20.75
13559	2.01	2.00	.....	.....	1.83	1.00	10.05	10.00	17.82	17.40
13450	3.20	3.00	.....	.....	23.45*	22.80*	.....	.....	30.34	.....
13530	.....	.....	3.14	3.00	.65	.....	6.60	6.00	8.55	7.80
13417	.....	.....	3.04	3.00	.65	.....	6.34	6.00	8.24	7.80
13491	.....	.....	13.55	12.00	.....	.....	.....	.....	.....	.....
13492	.....	.....	5.01	5.00	1.13	.....	12.02	12.00	14.86	14.60
13451	4.20	4.00	.....	.....	20.08*	20.60*	.....	.....	28.68	.....
13548	.....	.....	.....	.....	1.65	.....	14.22	14.00	11.38	11.20
13418	.....	.....	.....	.....	1.70	1.00	14.10	14.00	11.28	11.20
13452	1.30	1.00	2.21	2.00	1.23	.....	9.12	9.00	16.37	14.50
13453	1.28	1.00	1.29	1.00	1.43	.....	8.33	8.00	14.67	12.50
13561	2.39	2.00	3.52	2.50	6.18	.....	7.86	5.00	22.22	14.50
13549	.....	.....	3.40	3.00	.88	.....	12.01	12.00	13.19	12.60
13494	.....	.....	1.90	2.00	.95	.....	10.94	10.00	10.84	10.00
13454	1.59	1.50	2.30	2.00	1.95	.....	9.17	9.00	17.82	16.25
13550	.....	.....	2.35	2.00	1.03	.....	11.35	11.00	11.64	10.80
13551	1.24	1.00	3.35	3.00	1.83	.....	9.14	9.00	17.56	15.50
13400	.....	.....	.....	.....	1.35	.....	14.29	14.00	11.43	11.20
13455	2.29	2.50	.....	.....	2.35	2.00	8.71	8.00	17.67	17.55
13607	3.01	3.00	6.23	6.00	3.05	.....	6.74	6.00	24.73	22.50
13401	1.19	1.00	2.02	2.00	2.00	.....	8.74	8.00	15.73	13.50

*Total Phosphoric Acid.

No.	Name and Address of Manufacturer.	Name of Fertilizer.	Place of Sampling (and Sampler, when not the College.)
13402	A. A. C. Co., (Detrick)...	K. K. K.	Mt. Airy
13676	" " "	K. K. K.	Mt. Airy
13560	" " "	Orchilla Guano.....	(C. A. Schneider) Pocomoke City....
13403	" " "	P. & B. Special Fertilizer	Mt. Airy
13404	" " "	Paragon Ammo. Bone Phosphate and Potash.	Mt. Airy
13495	" " "	Quickstep Bone Phos.....	Baltimore
13405	" " "	Royal Crop Grower.....	Mt. Airy
13406	" " "	Soluble Bone Phosphate and Potash.	Mt. Airy
13419	" " "	Soluble Bone Phosphate and Potash.	Baltimore
13562	" " "	Special Mixture.....	Baltimore
13456	A. A. C. Co., (Lazaretto).	Ammoniated Bone Phos- phate.	Hampstead.....
13421	" " "	Bone Compound.....	Baltimore
13420	" " "	Crop Grower.....	Baltimore
13422	" " "	Dissolved Bone and Pot- ash.	Baltimore
13518	" " "	Dissolved Bone Phos.....	Hancock
13496	" " "	Excelsior A-A-A.....	Baltimore
13497	" " "	Forsythe & Linthicum Mixture.	Baltimore
13528	" " "	H. G. Dissolved Bone Phosphate and Potash.	Baltimore
13519	" " "	Retriever Animal Bone Fertilizer.	Hagerstown.....
13498	" " "	Special Wheat and Grass Fertilizer.	Baltimore
13529	A. A. C. Co., (Maryland) ..	Alkaline Bone.....	Frederick
13564	" " "	Ammoniated Bone.....	Snow Hill
13565	" " "	Bone Super-Phosphate ..	Baltimore

FERTILIZER ANALYSES.

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No.	NITROGEN Calculated as AMMONIA.		POTASH, K ₂ O.		PHOSPHORIC ACID.				Comparative Value per Ton Found.	Comparative Value per Ton Guaranteed.
	Found.	Guaranteed.	Found.	Guaranteed.	Insoluble.		Available.			
					Found.	Guaranteed.	Found.	Guaranteed.		
13402	2.39	2.00	3.48	3.00	3.15	.....	8.04	8.00	\$21.15	\$18.00
13676	2.53	2.00	3.71	3.00	3.43	.....	8.11	8.00	22.05	18.00
13560	.....	.....	.....	.....	13.38	13.00	4.53	4.00	8.97	8.40
13403	.....	.....	3.17	3.00	.38	.....	12.91	12.00	13.58	12.60
13404	1.42	1.00	1.32	1.00	1.98	.....	7.52	7.00	14.60	11.50
13495	3.14	3.00	4.40	4.00	2.28	.....	7.52	8.00	23.82	22.50
13405	2.18	2.00	2.25	2.00	2.15	.....	9.05	8.00	19.79	17.00
13406	.....	.....	2.01	2.00	.90	.....	10.17	10.00	10.33	10.00
13419	.....	.....	1.86	2.00	.93	.....	10.21	10.00	10.22	10.00
13562	1.30	1.00	1.70	1.00	1.23	.....	8.29	8.00	15.03	12.50
13456	1.26	1.00	2.29	2.00	1.90	.....	8.18	8.00	15.64	13.50
13421	1.50	1.25	3.15	3.00	2.48	.....	8.33	9.00	17.72	16.38
13420	2.16	2.00	2.32	2.00	1.65	.....	7.75	8.00	18.29	17.00
13422	.....	.....	1.94	2.00	1.05	.....	10.11	10.00	10.24	10.00
13518	.....	.....	.....	.....	1.43	.....	14.59	14.00	11.67	11.20
13496	1.25	1.00	1.06	1.00	2.58	.....	6.28	7.00	12.75	11.50
13497	2.46	2.25	4.19	4.00	2.05	4.50	11.29	9.00	24.91	22.68
13528	.....	.....	3.31	3.00	.90	.....	11.95	12.00	13.05	12.60
13519	2.46	2.25	4.01	4.00	1.98	4.50	11.47	9.00	24.88	22.68
13498	1.35	1.00	4.32	4.00	1.70	.....	8.06	8.00	17.79	15.50
13529	.....	.....	3.09	3.00	.48	.....	12.27	12.00	13.01	12.60
13564	1.95	2.00	2.87	3.00	2.63	.....	7.57	8.00	18.32	18.00
13565	.....	.....	2.40	2.00	1.08	.....	10.11	10.00	10.71	10.00

No.	Name and Address of Manufacturer.	Name of Fertilizer.	Place of Sampling (and Sampler, when not the College.)
13499	A. A. C. Co., (Maryland)..	Tornado.....	Baltimore.....
13566	A. A. C. Co., (Nickerson)	Acid Phosphate	Baltimore.....
13608	" " "	Alkaline Bone and Potash.	Baltimore.....
13567	" " "	Dissolved Bone and Potash.	Baltimore.....
13609	" " "	Eastern Shore Domestic Guano.	Baltimore.....
13610	" " "	English Mixture.	Baltimore.....
13500	A. A. C. Co., (Packers' Union)	Acidulated Bone	Baltimore.....
13457	" " "	Banner Wheat Grower...	Melrose.....
13568	" " "	Universal Fertilizer.....	Wakefield.....
13569	A. A. C. Co., (Reese).....	Special Crown Phosphate and Potash.	Chestertown.....
13458	A. A. C. Co., (Susquehanna)	Alkaline Bone Phosphate.	Hampstead
13423	" " "	Ammoniated Bone Phosphate.	Baltimore.....
13424	" " "	Crop Grower.....	Baltimore.....
13449	" " "	Crop Grower.....	Hampstead
13570	" " "	Grain and Grass Producer.	Willoughby
13662	" " "	Grain and Grass Producer	Frederick
13571	" " "	Pure Bone Phosphate....	(W. O. Glaze). Snow Hill.....
13425	" " "	Superior Rock Phosphate.	Baltimore.....
13459	" " "	X. X. V. Phosphate.....	Baltimore.....
13611	A. A. C. Co., (Tygert Allen)	Star Dissolved S. C. Rock	Boring.....
13460	A. A. C. Co., (Wheeler)...	Bone and Potash.....	Maple Grove.....
13520	" " "	Corn Fertilizer.....	Breathardsville ...
13521	" " "	Electric Dissolved Bone..	Breathardsville ...

No.	NITROGEN Calculated as AMMONIA.		POTASH, K ₂ O.		PHOSPHORIC ACID.				Comparative Value per Ton Found.	Comparative Value per Ton Guaranteed.
	Found.	Guaranteed.	Found.	Guaranteed.	Insoluble.		Available.			
					Found.	Guaranteed.	Found.	Guaranteed.		
13499	.....	.....	5.12	5.00	1.00	.....	12.02	12.00	\$14.94	\$ 14.60
13566	.....	.....	.....	.....	1.53	.....	14.47	14.00	11.53	11.20
13608	.....	.....	2.14	2.00	1.00	.....	11.34	10.00	11.41	10.00
13567	.....	.....	5.83	5.00	.80	.....	11.89	12.00	15.50	14.60
13609	2.37	2.00	3.03	3.00	3.73	.....	7.51	8.00	20.33	18.00
13610	1.37	1.00	2.50	2.00	.95	.....	8.02	8.00	15.70	13.50
13500	.....	.....	.....	.....	1.30	.....	14.74	14.00	11.79	11.20
13457	.....	.....	2.03	2.00	.75	.....	11.48	10.00	11.36	10.00
13568	1.28	1.00	4.34	4.00	1.60	.....	7.69	8.00	17.15	15.50
13569	.....	.....	2.26	2.00	1.05	.....	12.11	12.00	12.16	11.60
13458	.....	.....	2.09	2.00	1.23	.....	10.51	10.00	10.75	10.00
13423	2.15	2.00	2.08	2.00	2.23	.....	8.03	8.00	18.53	17.00
13424	1.31	1.00	1.20	1.00	1.68	.....	7.42	7.00	13.88	11.50
13449	1.19	1.00	1.22	1.00	2.13	.....	6.53	7.00	12.77	11.50
13570	.....	.....	3.15	3.00	1.07	.....	12.02	12.00	12.98	12.60
13662	.....	.....	3.36	3.00	.53	.....	12.19	12.00	13.22	12.60
13571	2.20	2.00	2.33	2.00	4.18	.....	8.75	9.00	20.45	18.00
13425	.....	.....	.....	.....	1.58	.....	14.02	14.00	11.22	11.20
13459	1.28	1.00	1.12	1.00	1.38	.....	8.68	8.00	14.83	12.50
13611	.....	.....	.....	.....	.68	.....	15.99	14.00	12.79	11.20
13460	.....	.....	3.02	3.00	1.08	.....	12.53	12.00	13.26	12.60
13520	2.25	2.00	2.11	2.00	1.80	.....	8.01	8.00	18.72	17.00
13521	.....	.....	.....	.....	1.50	.....	14.65	14.00	11.72	11.20

No.	Name and Address of Manufacturer.	Name of Fertilizer.	Place of Sampling, (and Sampler, when not the College.)
13522	A. A. C. C., (Wheeler)....	H. G. Tomato Fertz.....	Breathardsville....
13523	" " "	Potato Manure.....	Breathardsville....
13426	" " "	Royal Wheat Grower....	Baltimore.....
13501	" " "	Wheat and Clover Fertz..	Baltimore.....
13461	A. A. C. Co., (Zell).....	Ammoniated Bone Super Phosphate.	Taneytown.....
13407	" " "	Dissolved Bone Phosphate.	Emmitsburg.....
13408	" " "	Economizer Phosphate...	Emmitsburg.....
13462	" " "	Electric Phosphate.....	Union Mills.....
13524	" " "	Hustler Phosphate.....	Eakles Mills.....
13409	" " "	Little Giant.....	Emmitsburg.....
13612	" " "	Special Compound for Potatoes and Vegetables.	Catonsville.....
13463	Alexandria Fer. and Chem. Co., Alexandria, Va.	Dissolved S. C. Rock.....	Poolesville.....
13502	Armour Fertz. Works, Baltimore, Md.	Acidulated Bone Meal...	Baltimore.....
13503	" " "	Ammoniated Bone with Potash.	Baltimore.....
13464	" " "	Bone Meal.....	Kensington.....
13643	" " "	Fish Tankage.....	Cambridge (T. Harry Hopkins)
13613	" " "	Fruit and Root Crop Special.	Baltimore.....
13427	" " "	Grain Grower.....	Baltimore.....
13678	" " "	Grain Grower.....	Greensboro (W. E. Orrell)
13680	" " "	Grain Grower.....	Preston (F. J. Gadow)
13531	" " "	Phosphate and Potash....	Baltimore.....
13428	" " "	Phosphate and Potash, No. 1.	Baltimore.....
13429	" " "	Phosphate and Potash, No. 2.	Baltimore.....

No.	NITROGEN Calculated as AMMONIA.		POTASH, K ₂ O.		PHOSPHORIC ACID.				Comparative Value per Ton Found.	Comparative Value per Ton Guaranteed.
	Found.	Guaranteed.	Found.	Guaranteed.	Insoluble.		Available.			
					Found.	Guaranteed.	Found.	Guaranteed.		
13522	1.28	1.00	1.39	1.00	2.28	.....	6.89	7.00	\$13.67	\$11.50
13523	2.85	2.50	3.28	3.00	2.53	.....	7.64	8.00	21.91	19.75
13426	1.45	1.00	2.25	2.00	1.20	.....	8.23	8.00	16.04	13.50
13501	.....	.....	2.01	2.00	1.00	.....	10.40	10.00	10.53	10.00
13461	2.22	2.00	2.33	2.00	1.65	.....	7.71	8.00	18.47	17.00
13407	.....	.....	.....	.....	1.80	.....	14.14	14.00	11.31	11.20
13408	1.18	1.00	2.21	2.00	1.20	.....	8.18	8.00	15.00	13.50
13462	.....	.....	2.01	2.00	1.05	.....	10.35	10.00	10.50	10.00
13524	1.35	1.00	3.30	3.00	1.75	.....	8.77	9.00	17.50	15.50
13409	1.16	1.00	1.20	1.00	2.53	.....	6.54	7.00	12.81	11.50
13612	3.01	3.00	4.10	4.00	1.30	.....	8.39	8.00	23.55	22.50
13463	.....	.....	.....	.....	1.88	.....	14.05	14.00	11.24	11.20
13502	2.24	2.00	.....	.....	8.90	.....	11.25	11.00	22.65	18.00
13503	2.54	3.00	2.47	2.00	2.08	.....	6.58	6.00	18.77	18.50
13464	2.59	3.00	.....	.....	19.19*	24.00*	.....	.....	24.46	.....
13643	9.62	11.00	.....	.....	5.21*	7.00*	.....	.....	31.99	37.20
13613	2.01	2.00	5.32	5.00	1.82	.....	8.01	8.00	21.10	20.00
13427	2.13	2.00	2.44	2.00	1.55	.....	8.01	8.00	18.53	17.00
13678	1.98	2.00	2.35	2.00	.98	.....	9.08	8.00	18.75	17.00
13680	2.12	2.00	2.40	2.00	1.18	.....	8.14	8.00	18.43	17.00
13531	.....	.....	4.49	5.00	.73	.....	13.06	12.00	15.09	14.60
13428	.....	.....	2.20	2.00	.75	.....	9.90	10.00	10.27	10.00
13429	.....	.....	4.94	5.00	.50	.....	8.06	8.00	11.49	11.40

*Total Phosphoric Acid.

No.	Name and Address of Manufacturer.	Name of Fertilizer.	Place of Sampling. (and Sampler when not the College.)
13430	Armour Fertilizer Works, Baltimore, Md.	Raw Bone Meal.....	Baltimore.....
13431	" " "	Royal Ammoniated Bone.	Baltimore.....
13656	" " "	Royal Ammoniated Bone.	Preston..... (B. F. Edgell.)
13692	" " "	Royal Ammoniated Bone.	Federalsburg..... (J. F. Covey.)
13691	" " "	Royal Ammoniated Bone.	Bethlehem..... (Jas. A. Parrott)
13432	" " "	Special Mixture.....	Baltimore.....
13675	" " "	Special Mixture.....	Greensboro..... N. Horsey, of S. H.
13665	" " "	Special Mixture.....	Greensboro..... N. Horsey, of S. H.
13433	" " "	Star Phosphate.....	Baltimore.....
13572	" " "	Tankage.....	Pylesville.
13645	" " "	Tankage.....	Cambridge..... (T. H. Hopkins.)
13434	" " "	Wheat, Corn and Oat Special.	Baltimore.....
13435	" " "	Wheat Special.....	Baltimore.....
13436	" " "	York State Special.....	Baltimore.....
13532	" " "	Zouck's Special Mixture.	Baltimore.....
13604	Baltimore Fertilizer Com- pany, Baltimore, Md.	H. G. Acid Phosphate...	Two Johns.....
13573	" " "	H. G. Soluble Bone and Potash.	Millington.....
13504	" " "	Homestead.....	Baltimore.....
13437	" " "	King of the Harvest....	Baltimore.....
13438	" " "	Old Honesty, Your mon- ey's Worth.	Baltimore.....
13574	" " "	Old Honesty Bone Phos- phate.	Westminster.....
13641	" " "	Special Mixture.....	Cordova.....
13575	" " "	Standard (Unexcelled)...	Westminster.....

No.	NITROGEN Calculated as AMMONIA.		POTASH, K ₂ O.		PHOSPHORIC ACID.				Comparative Value per Ton Found.	Comparative Value per Ton Guaranteed.
	Found.	Guaranteed.	Found.	Guaranteed.	Insoluble.		Available.			
					Found.	Guaranteed.	Found.	Guaranteed.		
13430	4.73	4.00	.....	.....	24.65*	22.00*	.....	.....	\$31.11	.....
13431	1.14	1.00	4.29	4.00	1.30	.....	8.66	8.00	17.46	\$15.50
13656	1.25	1.00	4.22	4.00	1.40	.....	8.24	8.00	17.40	15.50
13692	1.06	1.00	4.04	4.00	.70	.....	7.92	8.00	15.95	15.50
13691	1.19	1.00	4.58	4.00	.93	.....	8.36	8.00	17.48	15.50
13432	.65	.50	1.40	1.00	1.25	.....	8.23	8.00	10.51	9.15
13675	.....	.....	5.27	5.00	.48	.....	12.61	12.00	15.46	14.60
13665	.....	.....	5.19	5.00	.30	.....	12.85	12.00	15.53	14.60
13433	.....	.....	.....	.....	1.83	.....	14.03	14.00	11.22	11.20
13572	8.45	9.00	.....	.....	7.25*	.....	.....	.....	29.70	27.00
13645	8.30	8.50	.....	.....	9.00*	7.00*	.....	.....	30.30	29.70
13434	1.21	1.00	1.24	1.00	1.75	.....	7.17	7.00	13.35	11.50
13435	1.08	1.00	2.31	2.00	.95	.....	8.55	8.00	15.02	13.50
13436	1.26	1.00	4.66	4.00	1.70	.....	7.74	8.00	17.49	15.50
13532	2.40	.....	.....	.....	2.20	.....	10.99	.....	20.27	.....
13604	.....	.....	.....	.....	.30	.....	13.03	14.00	10.42	11.20
13573	.....	.....	1.54	2.00	1.15	.....	11.55	10.00	11.01	10.00
13504	2.17	1.50	2.06	2.00	1.90	.....	8.05	8.00	18.47	15.25
13437	.96	1.00	3.92	3.00	1.10	.....	9.04	10.00	16.76	16.50
13438	.61	.50	2.23	2.00	.83	.....	8.37	8.00	11.25	10.15
13574	.55	.25	1.40	1.00	2.55	.....	7.32	7.00	9.70	7.48
13641	.75	2.50	1.84	1.25	2.70	.....	10.35	10.00	13.29	20.00
13575	1.35	1.50	3.28	3.00	1.53	.....	8.96	10.00	17.58	18.25

*Total Phosphoric Acid.

No.	Name and Address of Manufacturer.	Name of Fertilizer.	Place of Sampling (and Sampler when not the College.)
13614	Baltimore Pulverizing Co., Baltimore, Md.	Ammo. Excelsior Fertz..	Baltimore.....
13525	" " "	Charleston, S. C. Phos...	Brownsville.....
13668	" " "	Charleston, S. C. Phos...	Weverton..... W. F. Stonebraker.
13615	" " "	Farmers' Favorite Fertz.	Baltimore.....
13576	" " "	H. G. Wheat Compound..	Baltimore.....
13465	" " "	Montgomery Special.....	Laytonsville.
13577	" " "	Peerless Fertilizer.....	Baltimore.....
13616	" " "	Penniman's Excelsior Fer- tilizer.	Baltimore.....
13578	" " "	Penniman's Special Guano No. 1.	Greensboro.....
13667	" " "	Penniman's Special Guano No. 1.	Brookeville (D. S. Craver.)
13466	" " "	Pure Animal Raw Bone..	Laytonsville.
13617	" " "	Royal Wheat Special.....	Baltimore.....
13618	" " "	S. C. Bone Phosphate....	Baltimore.....
13619	" " "	Special Spring Mixture...	Baltimore.....
13605	" " "	(Star) Special. Fall Mix- ture.	Williston
13467	" " "	(Star) Special Guano No. 1.	Grifton.....
13440	Baugh & Sons Company, Baltimore, Md.	Ammo. Soluble Alkaline..	Baltimore.....
13441	" " "	Animal Bone and Potash Compound.	Baltimore.....
13650	" " "	Bone Tankage.....	Darlington
13505	" " "	Complete Animal Bone Fertilizer.	Baltimore.....
13533	" " "	Covey's Standard Bone Phosphate.	Baltimore.....
13468	" " "	Double Eagle (\$25) Phos.	Laytonsville.
13469	" " "	Excelsior Super-Phos.....	Taneytown.....

No.	NITROGEN Calculated as AMMONIA.		POTASH, K ₂ O.		PHOSPHORIC ACID.				Comparative Value per Ton Found.	Comparative Value per Ton Guaranteed.
	Found.	Guaranteed.	Found.	Guaranteed.	Insoluble.		Available.			
					Found.	Guaranteed.	Found.	Guaranteed.		
13614	1.45	1.00	2.30	†5.00	1.80	.....	8.69	10.00	\$ 16.79	\$18.50
13525	.....	.....	.....	.....	1.65	.....	8.65	.....	6.92	.....
13668	.....	.....	.....	.....	1.48	.....	9.04	.....	7.23	.....
13615	1.37	1.00	1.42	1.50	1.53	.....	5.82	5.50	12.65	10.50
13576	2.05	2.00	1.60	2.00	1.48	.....	10.60	8.00	19.97	17.00
13465	1.35	1.00	1.76	2.00	.75	.....	10.61	10.00	17.40	15.50
13577	.67	.35	1.83	2.00	1.23	1.00	8.65	8.00	11.35	9.83
13616	.....	.....	2.54	†5.00	.88	.....	10.88	10.00	11.42	13.00
13578	1.01	1.00	1.01	1.00	2.25	.....	8.95	8.00	14.40	12.50
13667	1.01	1.00	1.85	1.00	1.10	.....	9.10	8.00	14.93	12.50
13466	2.71	.....	.....	.....	26.33*	.....	.....	.....	29.85	.....
13617	.....	.....	3.34	4.00	1.68	.....	12.09	12.00	13.35	13.60
13618	.....	.....	.....	.....	.90	2.00	14.36	14.00	11.49	11.20
13619	.....	.....	1.33	2.00	1.03	1.00	8.55	8.00	8.38	8.60
13605	.....	.....	1.00	2.00	.98	1.00	8.79	8.00	8.23	8.60
13467	1.06	1.00	1.05	1.00	.80	.....	9.06	8.00	14.14	12.50
13440	.80	.50	2.55	2.00	2.40	2.50	8.35	8.00	12.51	10.65
13441	2.10	2.00	2.22	2.00	1.55	.....	9.42	8.00	19.61	17.00
13650	8.64	9.00	.....	.....	4.99*	.....	.....	.....	28.91	27.00
13505	2.08	2.00	5.35	5.00	2.60	.....	8.80	8.00	22.47	20.00
13533	1.30	1.00	4.02	5.00	2.03	2.00	11.04	11.00	20.42	20.30
13468	2.54	2.00	1.31	1.00	2.30	2.50	8.33	8.00	19.45	17.00
13469	1.28	1.00	4.17	4.00	2.05	3.00	8.22	8.00	17.69	16.70

*Total Phosphoric Acid.

†"Sulphate of Potash."

No.	Name and Address of Manufacturer.	Name of Fertilizer.	Place of Sampling (and Sampler when not the College.)
13526	Baugh & Sons Company, Baltimore, Md.	Export Bone with Potash	Williamsport.....
13534	" " "	Fine Ground Fish.....	Baltimore.....
13410	" " "	General Crop Grower.....	Monrovia
13689	" " "	General Crop Grower.....	Federalburg (E. R. Cohee.)
13535	" " "	Genuine Lobos Peruvian Guano.	Baltimore.....
13439	" " "	H. G. Acid Phosphate....	Frederick.....
13490	" " "	Hopfenmaire's Bone	Senica.....
13506	" " "	McKenny's Compound....	Baltimore.....
13507	" " "	McKenny's No. 1.—D....	Baltimore.....
13630	" " "	Peninsula Grain Producer	Baltimore.....
13508	" " "	Phosphate and Potash....	Baltimore.....
13443	" " "	Potash Manure.....	Baltimore.....
13470	" " "	Pure Dissolved Animal Bone.	Gaithersburg
13579	" " "	Pure Dissolved Animal Bone.	Lapidum.....
13471	" " "	Raw Bone Meal.....	Senica.....
13660	" " "	Raw Bone Meal.....	Mt. Airy..... (Jno. N. Clay.)
13699	" " "	Raw Bone Meal.....	Glendale..... (D. B. Lloyd.)
13684	" " "	Raw Bone Meal.....	Hobbs..... (C. W. Hobbs.)
13661	" " "	Rock and Potash.....	Mt. Airy..... (Jno. N. Clay.)
13580	" " "	16% Acid Phosphate.....	Baltimore.....
13411	" " "	Soluble Alkaline Super-Phosphate.	Monrovia
13697	" " "	Special Mixture.....	Tolchester..... (Thos. Hill.)
13688	" " "	Special Mixture.....	Glyndon..... (N. J. Geist.)

No.	NITROGEN Calculated as AMMONIA.		POTASH, K ₂ O.		PHOSPHORIC ACID.				Comparative Value per Ton Found.	Comparative Value per Ton Guaranteed.
	Found.	Guaranteed.	Found.	Guaranteed.	Insoluble.		Available.			
					Found.	Guaranteed.	Found.	Guaranteed.		
13526	2.45	2.00	2.50	2.00	5.30	.....	8.67	23.00	\$21.87	\$32.00
13534	10.48	10.00	.....	.....	6.40*	.....	.....	.....	35.28	30.00
13410	1.28	1.00	1.53	1.00	2.43	.....	8.08	8.00	15.06	12.50
13689	1.47	1.00	1.77	1.00	1.55	.....	8.92	8.00	16.46	12.50
13535	3.41	3.50	3.61	3.50	14.70	.....	10.03	10.00	31.46	25.75
13439	.....	.....	.....	.....	2.40	.....	14.39	14.00	11.51	11.20
13490	4.20	4.00	.....	.....	22.34*	47.00†	.....	.....	31.97	.....
13506	1.71	1.50	2.34	1.75	1.53	.....	10.54	10.00	19.48	17.00
13507	1.77	1.75	2.94	2.25	2.50	.....	8.59	6.00	18.73	14.38
13630	1.18	1.00	2.25	2.00	1.18	.....	8.52	8.00	15.37	13.50
13508	.....	.....	3.21	3.00	2.20	.....	12.62	12.00	13.75	12.60
13443	.....	.....	3.11	3.00	1.60	.....	12.10	12.00	13.11	12.60
13470	2.93	2.50	.....	.....	3.10	.....	14.05	13.00	25.55	21.75
13579	3.02	2.50	.....	.....	2.53	.....	14.02	13.00	25.60	21.75
13471	4.64	4.50	.....	.....	20.36*	21.50*	.....	.....	32.06	.....
13660	5.06	4.25	.....	.....	21.90*	21.50*	.....	.....	34.31	.....
13699	4.80	4.25	.....	.....	21.07*	21.50*	.....	.....	31.34	.....
13684	5.30	4.50	.....	.....	21.65*	21.00*	.....	.....	33.64	.....
13661	.....	.....	5.40	5.00	2.13	.....	11.28	10.00	14.85	13.00
13580	.....	.....	.....	.....	0.38	.....	17.28	16.00	13.82	12.80
13411	.....	.....	2.36	2.00	2.60	.....	9.08	10.00	10.14	10.00
13697	2.40	1.80	2.95	3.25	4.30	.....	11.15	14.20	24.22	23.75
13688	2.32	2.50	6.46	5.00	1.88	1.50	8.72	8.00	24.05	22.35

*Total Phosphoric Acid.

†Total "Bone Phosphate."

No.	Name and address of Manufacturer.	Name of Fertilizer.	Place of Sampling (and Sampler, when not the College.)
13657	Baugh & Sons' Co., Baltimore, Md.	Special Mixture.....	Federalsburg..... (E. E. Goslin.)
13651	" " "	Special Mixture.....	Hagerstown..... (M. Wingert.)
13625	" " "	Tomato Compound.....	Baltimore.....
13472	" " "	Wheat Fertilizer for •Wheat and Grass.	Rockville.....
13581	Beck, Walker Co., Chestertown, Md.	Propagator Super-Phos...	Chestertown.....
13582	" " "	Special Bone Mixture....	Chestertown.....
13583	" " "	Try Me Super-Phosphate.	Chestertown.....
13536	The Berg Company, Philadelphia, Pa.	Pure Diss. Bone and Pot. for Wheat and Grass.	Ellicott City.....
13537	" " "	Raw Bone—Fine.....	Ellicott City.....
13584	" " "	Standard Bone Manure..	Fallston.....
13552	" " "	\$25.00, Special Bone Manure.	Elkton.....
13444	A. D. Birely & Son, La- diesburg, Md.	Ammoniated Bone Phos..	Baltimore.....
13412	" " "	Crop Producer.....	Walkersville.....
13585	" " "	Dissolved Animal Bone and Potash.	Baltimore.....
13413	" " "	Plant Food.....	Walkersville.....
13473	J. H. Blocher, Alesia, Md.	Royal Bone and Potash..	Alesia.....
13474	C. E. Bond, Spencerville, Md.	Acid Phosphate.....	Spencerville.....
13475	" " "	Pure Raw Bone.....	Spencerville.....
13476	S. B. Brodbeck, Brodbeck, Pa.	Ruth's Diss. Bone Phos..	Union Mills.....
13445	Brumfield & Foster, Co- lora, Md.	Ammo. Bone Phosphate..	Baltimore.....
13477	Bryant Fertilizer Compa- ny, Alexandria, Va.	Fine Ground Raw Bone..	Silver Spring.....
13538	John L. Clark, Ellicott City, Md.	Potash Manure.....	Ellicott City.....
13539	" " "	Special Mixture.....	Ellicott City.....

FERTILIZER ANALYSES.

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No.	NITROGEN Calculated as AMMONIA.		POTASH. K ₂ O.		PHOSPHORIC ACID.				Comparative Value per Ton Found.	Comparative Value per Ton Guaranteed.
	Found.	Guaranteed.	Found.	Guaranteed.	Insoluble.		Available.			
					Found.	Guaranteed.	Found.	Guaranteed.		
13657	2.46	1.80	2.63	3.40	5.63	5.00	9.01	9.00	\$22.50	\$20.70
13651	2.25	2.00	4.83	5.00	1.68	.....	11.18	10.00	24.56	22.00
13620	1.76	2.00	4.63	2.00	2.25	.....	6.33	8.00	18.02	17.00
13472	2.25	2.00	2.43	2.00	1.50	.....	8.64	8.00	19.55	17.00
13581	2.05	2.00	2.99	2.50	2.65	.....	8.14	8.00	19.37	17.50
13582	1.28	1.00	3.15	2.00	3.10	.....	8.01	8.00	16.88	13.50
13583	0.60	0.50	3.76	3.00	2.93	.....	9.04	9.00	13.68	11.95
13536	1.38	3.00	3.51	3.50	3.80	.....	9.01	9.00	18.87	23.00
13537	4.30	4.00	.....	.....	22.84*	20.00*	.....	.....	29.74	.....
13584	2.58	3.00	6.17	6.00	3.85	.....	9.08	8.00	25.72	24.50
13552	2.20	2.00	3.24	3.00	3.08	.....	8.72	7.00	20.89	17.00
13444	0.78	0.50	1.28	1.00	1.53	.....	8.21	8.00	10.89	9.15
13412	.....	.....	2.20	2.00	1.03	.....	9.06	9.00	9.66	9.20
13585	1.37	1.00	2.37	2.00	1.13	.....	8.86	9.00	16.48	14.50
13413	2.12	2.00	2.16	2.00	1.58	.....	7.92	8.00	18.13	17.00
13473	.....	.....	1.12	1.00	1.03	1.00	8.74	9.00	8.32	8.40
13474	.....	.....	.....	.....	8.62	.....	10.78	14.00	8.62	11.20
13475	4.76	4.50	.....	.....	22.47*	20.00*	.....	.....	31.56	.....
13476	.....	.....	.....	.....	0.90	.....	14.93	14.00	11.94	11.20
13445	2.12	2.00	2.40	2.00	1.45	1.00	7.64	8.00	18.04	17.40
13477	5.02	4.50	.....	.....	23.25*	21.50*	.....	.....	31.87	.....
13538	.....	.....	5.26	5.00	1.45	1.00	10.33	10.00	13.81	13.20
13539	0.75	0.50	2.91	3.00	1.90	1.00	8.17	8.00	12.46	11.35

*Total Phosphoric Acid.

No.	Name and Address of Manufacturer.	Name of Fertilizer.	Place of Sampling (and Sampler when not the College.)
13540	John L. Clark, Ellicott City, Md.	Standard Bone Phosphate	Ellicott City.....
13553	Josiah Cope & Co., Lincoln University, Pa.	Ammo. Bone Phosphate..	Rising Sun.....
13586	" " " "	Soluble Bone and Potash.	Glencoe.....
13587	" " " "	Wheat and Grass Special.	Glencoe.....
13478	Cutshall & Fogle, Woodsboro, Md.	Maryland Alkaline Phos..	Taneytown.....
13821	" " " "	Maryland Alkaline Phos..	Woodsboro.....
13823	" " " "	Maryland Crop Grower...	Woodsboro.....
13479	" " " "	Maryland Soluble Bone Phosphate.	Taneytown.....
13820	" " " "	Maryland Soluble Bone Phosphate.	Woodsboro.....
13822	" " " "	Maryland Sun Guano.....	Woodsboro.....
13480	" " " "	Maryland Sun Guano.....	Taneytown.....
13541	Joshua W. Dorsey, Ellicott City, Md.	Mixture "D".....	Ellicott City.....
13588	Dudley & Carpenter, Baltimore, Md.	Dissolved S. C. Rock.....	Baltimore.....
13589	" " " "	Special Wheat Mixture...	Centreville.....
13621	Edelen Bros., Baltimore, Md.	Special Wheat and Grass Mixture.	Baltimore.....
13591	T. W. Eliason, Jr., Chestertown, Md.	No. 1. Ammo. Super-Phos. of Lime and Potash.	Chestertown.....
13592	" " " "	Our Special Alkaline Phosphate and Potash.	Baltimore.....
13633	" " " "	Our Special Alkaline Phosphate and Potash.	Betterton.....
13481	Englar Bros. & Co., Linwood, Md.	No. 1. Ammoniated Bone Phosphate.	Uniontown.....
13482	" " " "	No. 2. Ammoniated Bone Phosphate.	Linwood.....
13590	D. Englar Jr., Medford, Md.	No. 3. Bone Phosphate...	Meadford.....
13554	Eureka Fertilizer Company, Perryville, Md.	Alkaline Bone and Potash	Rising Sun.....
13555	" " " "	Grain and Grass Mixture.	Rising Sun.....

FERTILIZER ANALYSES.

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No.	NITROGEN Calculated as AMMONIA.		POTASH K ₂ O.		PHOSPHORIC ACID.				Comparative Value per Ton Found.	Comparative Value per Ton Guaranteed.
	Found.	Guaranteed.	Found.	Guaranteed.	Insoluble.		Available.			
					Found.	Guaranteed.	Found.	Guaranteed.		
13540	2.08	2.00	3.57	3.00	2.05	1.00	9.92	9.00	\$21.59	\$19.40
13553	1.25	1.00	3.33	3.00	1.75	2.00	9.92	10.00	18.33	17.30
13586	.....	.....	2.02	2.00	0.78	.....	10.60	10.00	10.66	10.00
13587	1.30	1.00	1.22	1.00	1.35	.....	8.05	8.00	14.36	12.50
13478	.....	.....	2.38	2.00	2.08	2.00	10.02	10.00	10.82	10.40
13821	.....	.....	2.37	2.00	1.88	2.00	10.06	10.00	10.80	10.40
13823	2.22	2.00	2.30	2.00	1.58	2.00	7.33	8.00	18.03	17.80
13479	.....	.....	.....	.....	1.23	1.00	14.57	14.00	11.66	11.20
13820	.....	.....	.....	.....	1.55	1.00	9.91	14.00	7.93	11.20
13822	0.99	0.50	1.47	1.00	2.35	1.00	6.59	8.00	10.68	9.35
13480	0.94	0.50	1.31	1.00	1.98	1.00	6.56	8.00	10.25	9.35
13541	2.47	2.25	4.40	4.00	1.43	1.50	9.54	9.00	23.16	21.48
13588	.....	.....	.....	.....	0.98	.....	14.05	14.00	11.24	11.20
13589	.....	.....	3.19	3.00	0.88	.....	12.01	12.00	12.98	12.60
13621	1.37	1.00	3.36	2.00	2.45	.....	10.14	9.00	19.28	14.50
13591	1.59	1.50	2.60	1.00	1.25	2.50	11.18	9.00	19.85	16.25
13592	.....	"0"	2.54	1.50	2.25	2.00	11.02	11.00	11.81	10.70
13633	.....	"0"	1.74	1.50	2.38	2.00	12.40	11.00	12.14	10.70
13481	1.40	2.50	1.47	1.80	1.85	.....	10.75	11.25	17.86	21.80
13482	0.90	1.75	2.56	2.00	1.80	.....	10.41	11.00	16.84	19.13
13590	1.60	1.25	2.88	2.00	1.20	1.50	9.73	9.50	18.69	16.48
13554	.....	.....	1.51	2.00	2.88	.....	10.48	10.00	10.47	10.00
13555	1.26	1.00	2.28	2.00	2.48	.....	8.68	8.00	16.36	13.50

No.	Name and Address of Manufacturer.	Name of Fertilizer.	Place of Sampling, (and Sampler when not the College.)
13556	Eureka Fertilizer Company, Perryville, Md.	Imperial Bone Phosphate.	Rising Sun.....
13595	W. S. Farmer & Co., Bal- timore, Md.	B. & P. Phosphate.....	Baltimore.....
13622	" " "	Clyde Brand.....	Baltimore.....
13623	" " "	Harvest Queen Phosphate	Baltimore.....
13606	" " "	Dissolved S. C. Bone....	Hurlock.....
13593	Farmers & Planters' Co., Salisbury, Md.	Fish Mixture.....	Salisbury.....
13557	" " "	General Crop Grower....	Snow Hill.....
13594	" " "	Special Wheat Mixture..	Salisbury.....
13596	Farmers' Fertilizer Co., of Carroll Co., West' ter, Md.	Acid Phosphate.....	Baltimore.....
13597	" " "	Carroll Bone Phosphate..	Westminster.....
13632	" " "	No. 1. Bone Phosphate...	Westminster.....
13599	" " "	No. 2. Bone Phosphate...	Westminster.....
13600	" " "	No. 3. Bone Phosphate...	Westminster.....
13601	" " "	P. A. & P.—Phosphate...	Westminster.....
13602	" " "	X. X. Bone Phosphate...	Westminster.....
13483	Farmers' Fertz. Co., of U. Bridge, U. Bridge, Md.	Farmers' Choice.....	Union Bridge.....
13484	" " "	No. 1. Bone Fertilizer...	Union Bridge.....
13788	" " "	Union Bridge Favorite...	Union Bridge.....
13542	Frederick Co., Farmers' Exchange, Frederick, Md.	Acid Phosphate.....	Frederick.....
13543	" " "	Ammo. Bone Phosphate..	Frederick.....
13509	" " "	S. C. Rock and Potash...	Baltimore.....
13510	J. W. Freeman, Great Mills, Md.	Crop Grower.....	Baltimore.....
13624	" " "	Freeman's Special.....	Baltimore.....

No.	NITROGEN Calculated as AMMONIA.		POTASH, K ₂ O.		PHOSPHORIC ACID.				Comparative Value per Ton Found.	Comparative Value per Ton Guaranteed.
	Found.	Guaranteed.	Found.	Guaranteed.	Insoluble.		Available.			
					Found.	Guaranteed.	Found.	Guaranteed.		
13556	1.31	1.00	1.54	1.00	2.58	.....	8.53	8.00	\$15.69	\$12.50
13595	.....	.....	1.90	2.00	1.03	.....	10.78	10.00	10.73	10.00
13622	1.37	1.00	2.48	2.00	0.95	.....	8.10	8.00	15.76	13.50
13623	1.45	1.25	3.32	3.00	1.85	.....	8.59	9.00	17.73	16.38
13606	.....	.....	.....	.....	0.90	.....	14.18	14.00	11.34	11.20
13593	1.81	3.00	2.22	2.00	2.60	.....	8.64	7.00	18.24	19.50
13557	1.23	1.00	2.20	2.00	1.20	.....	11.07	10.00	18.06	15.50
13594	2.18	3.00	1.93	2.00	3.48	.....	8.35	8.00	19.30	20.50
13596	.....	.....	.....	.....	1.05	2.00	14.88	14.00	11.90	11.20
13597	0.68	0.50	2.90	2.00	0.50	1.00	8.09	7.00	11.85	9.55
13632	2.51	2.50	3.00	2.50	1.10	2.00	8.38	9.00	20.61	21.05
13599	2.17	2.00	3.00	2.50	0.98	1.00	8.79	9.00	19.78	18.90
13600	1.51	1.50	3.21	3.00	0.95	1.00	8.22	8.00	17.10	16.65
13601	.....	.....	3.67	3.00	0.40	.....	11.11	11.00	12.64	11.80
13602	1.23	1.00	3.04	3.00	0.75	1.00	8.94	9.00	16.59	15.90
13483	1.19	1.00	2.20	1.75	1.10	.....	8.04	8.00	14.85	13.25
13484	1.93	1.50	2.23	1.75	1.45	1.00	7.81	8.50	17.38	15.70
13788	1.02	1.50	2.54	2.50	1.65	.....	8.81	8.00	15.58	15.75
13542	.....	.....	.....	.....	0.55	.....	14.05	14.00	11.24	11.20
13543	1.25	1.00	2.40	2.00	2.70	.....	10.08	10.00	17.94	15.50
13509	.....	.....	3.05	3.00	0.30	.....	10.62	10.00	11.61	11.00
13510	1.14	1.00	1.23	1.00	1.58	1.50	8.61	8.00	14.46	13.10
13624	1.25	1.00	2.50	2.00	1.05	1.50	9.52	9.00	16.92	15.10

No.	Name and Address of Manufacturer.	Name of Fertilizer	Place of Sampling. (and Sampler when not the College.)
13485	Gaithersburg Milling Co., Gaithersburg, Md.	Walker's Mixture.....	Laytonsville.....
13486	" " "	Special Mixture.....	Laytonsville.....
13625	T. H. Gill, Avalon, Va.....	Try Me.....	Baltimore.....
13603	N. I. Gorsuch Son Co., Westminster, Md.	Westminster Diss. Raw Bone Phosphate.	Baltimore.....
13487	Griffith & Boyd, Baltimore, Md.	Ammo. Bone Phos.....	Union Mills.....
13626	" " "	Ammo. Soluble Bone.....	Baltimore.....
13488	" " "	Cereal Bone Plant Food..	Union Mills.....
13545	" " "	Fish Bone and Potash....	Baltimore.....
13511	" " "	Harvest Queen.....	Baltimore.....
13414	" " "	H. G. Acid Phosphate....	Myersville.....
13415	" " "	Peerless Fertilizer.....	Myersville.....
13512	" " "	Pure Dissolved Animal Bone.	Baltimore.....
13546	" " "	Pure Fine Ground Bone Meal.	Baltimore.....
13489	" " "	Royal Potash Guano.....	Union Mills.....
13513	" " "	Special Alkaline Bone Mixture.	Baltimore.....
13669	" " "	Special Alkaline Bone Mixture.	Cecilton (L. W. Davis.)
13527	" " "	Special Grain Grower....	Cumberland.....
13547	" " "	Special Guano.....	Baltimore.....
13514	" " "	Spring Crop Grower....	Baltimore.....
13627	" " "	Stable Manure Substitute.	Baltimore.....
13416	" " "	Valley Fertilizer.....	Myersville.....
13696	" " "	Valley Fertilizer.....	Kennedysville.....
13515	" " "	XX Potash Manure.....	Baltimore.....

No.	NITROGEN Calculated as AMMONIA.		POTASH, K ₂ O.		PHOSPHORIC ACID.				Comparative Value per Ton Found.	Comparative Value per Ton Guaranteed.
	Found.	Guaranteed.	Found.	Guaranteed.	Insoluble.		Available.			
					Found.	Guaranteed.	Found.	Guaranteed.		
13485	1.06	.....	1.96	.....	1.17	.....	9.32	.....	\$15.46	.....
13486	2.30	.....	4.23	.....	8.80	.....	8.54	.....	24.34	.....
13625	2.13	2.00	3.03	2.00	1.55	.....	9.42	9.00	20.53	\$18.00
13603	1.59	1.40	2.35	2.25	1.68	1.00	7.88	7.00	16.47	14.55
13487	2.30	2.00	2.44	2.00	1.23	.....	8.27	8.00	19.25	17.00
13626	1.31	1.00	2.19	2.00	2.75	.....	8.36	7.00	16.24	12.50
13488	1.23	1.00	2.07	2.00	1.70	.....	8.19	8.00	15.25	13.50
13545	1.43	1.75	3.35	3.00	1.55	.....	7.90	7.00	16.88	16.13
13511	1.26	1.00	3.11	3.00	1.40	.....	9.24	9.00	19.32	15.50
13414	.....	.....	.....	.....	0.93	.....	15.11	14.00	12.09	11.20
13415	0.51	0.35	2.21	2.00	2.35	.....	7.37	8.00	10.37	9.63
13512	1.88	2.50	.....	.....	3.03	.....	10.77	10.00	18.56	18.75
13546	4.47	4.00	.....	.....	20.32*	22.00*	.....	.....	28.35	.....
13489	0.96	1.00	3.80	4.00	1.68	.....	9.56	8.00	17.39	15.50
13513	.....	.....	2.83	3.00	1.85	.....	12.03	12.00	12.82	12.60
13669	.....	.....	2.92	3.00	1.78	.....	12.26	12.00	13.09	12.60
13527	.....	.....	2.41	2.00	2.05	.....	10.69	10.00	11.37	10.00
13547	1.79	2.25	4.92	5.00	1.43	.....	10.38	9.00	22.14	21.88
13514	1.30	2.00	4.75	4.50	1.45	.....	8.99	6.50	18.87	18.00
13627	3.16	3.50	3.40	4.00	1.93	.....	6.69	5.00	21.92	21.25
13416	0.68	0.50	2.03	3.00	1.80	.....	8.39	8.00	11.48	11.15
13696	0.74	0.50	3.46	3.00	1.50	.....	8.64	8.00	13.26	11.15
13515	.....	.....	4.90	5.00	1.15	.....	10.10	10.00	13.21	13.00

*Total Phosphoric Acid.

No.	Name and Address of Manufacturer.	Name of Fertilizer.	Place of Sampling (and Sampler when not the College.)
13446	Griffith & Turner Co., Baltimore, Md.	Alkaline Plant Food	Baltimore.....
13447	" " "	Animal Bone Phosphate. .	Baltimore.....
13631	" " "	Animal Bone Phosphate..	Reisterstown
13448	" " "	Dissolved Bone	Baltimore.....
13628	" " "	H. G. Acid Phosphate....	Reisterstown
13629	" " "	Special Mixture.....	Reisterstown
13878	Hanway, Barnes & McComas, Bel Air, Md.	H. & K. Diss. Bone.....	Sharon
13879	" " "	H. & K. Ground Bone....	Bel Air.....
13880	" " "	H. & K. Special Mixture.	Bel Air.....
13881	" " "	H. & K. Standard H. G. Fertilizer.	Bel Air.....
13944	W. R. Hearn & Son, Cambridge, Md.	Farmers' Pride "\$" Fertilizer.	Cambridge.....
13642	" " "	Tobacco Stems.....	Cambridge (T. H. Hopkins.)
13744	S. M. Hess & Bro., Philadelphia.	Ammo. Bone Super Phos.	Union Mills.....
13792	" " "	Farmers' Cereal King....	Baltimore.....
13861	" " "	Ground Bone.....	Leslie.....
13745	" " "	Keystone Bone Phos....	Union Mills.....
13746	" " "	Soluble Bone and Potash.	Union Mills.....
13862	" " "	Wheat and Grass Manure.	Leslie.
13700	W. H. Hood, Mt. Airy, Md.	Special Mixt. for Grain and Grass.	Mt. Airy.....
13824	The Hubbard Fertz. Co., Baltimore, Md.	Alkaline	Baltimore.....
13653	" " "	Alkaline.....	Baltimore (J. T. Morris.)
13666	" " "	Alkaline.....	Vienna (A. Webb)
13724	" " "	Climax Bone Super Phosphate.	Baltimore.....

No.	NITROGEN Calculated as AMMONIA.		POTASH, K ₂ O.		PHOSPHORIC ACID.				Comparative Value per Ton Found.	Comparative Value per Ton Guaranteed.
	Found.	Guaranteed.	Found.	Guaranteed.	Insoluble.		Available.			
					Found.	Guaranteed.	Found.	Guaranteed.		
13446	1.19	1.00	1.80	1.50	2.33	1.00	7.14	6.00	\$14.04	\$11.40
13447	2.05	2.50	2.54	1.50	1.08	1.00	8.56	10.00	18.73	20.65
13631	1.76	2.50	2.41	1.50	2.65	1.00	9.26	10.00	18.89	20.65
13448	2.42	2.00	.....	.....	1.85	1.00	10.38	9.00	19.59	16.40
13628	.....	.....	.....	.....	1.08	1.00	15.04	14.00	12.03	11.20
13629	0.70	0.50	2.02	2.00	1.70	1.00	9.79	8.00	12.64	10.35
13878	2.34	2.00	.....	.....	2.08	1.00	9.89	10.00	18.91	17.40
13879	3.33	3.00	.....	.....	24.91*	22.00*	.....	.....	32.35	.....
13880	1.28	1.00	2.31	2.00	1.50	1.00	9.05	9.00	16.44	14.90
13881	2.29	2.00	3.23	3.00	3.80	1.00	7.34	8.00	20.12	18.40
13944	1.26	1.00	4.02	4.00	1.28	.....	8.86	8.00	17.80	15.50
13642	1.28	.....	4.25	.....	0.64*	.....	.....	.....	9.11	.....
13744	2.20	2.00	2.02	2.00	2.53	.....	7.56	8.00	18.29	17.00
13792	.....	.....	3.40	3.00	1.00	1.00	12.13	12.00	13.30	12.80
13861	4.30	4.00	.....	.....	23.25*	20.00*	.....	.....	31.47	.....
13745	1.26	1.00	1.27	1.00	1.13	.....	8.31	8.00	14.44	12.50
13746	.....	.....	2.16	2.00	1.30	1.00	10.16	10.00	10.55	10.20
13862	1.28	1.00	2.42	2.00	1.33	1.00	7.87	8.00	15.30	13.90
13700	1.06	1.00	1.95	2.00	3.03	.....	9.43	9.00	16.30	14.50
13824	.....	.....	2.94	5.00	0.58	.....	11.30	12.00	12.10	14.60
13653	.....	.....	4.40	5.00	2.43	.....	11.28	12.00	13.91	14.60
13666	.....	.....	5.75	5.00	0.73	.....	12.83	12.00	16.16	14.60
13724	1.57	1.00	3.19	4.00	2.18	.....	6.89	7.00	16.45	14.50

*Total Phosphoric Acid.

No.	Name and Address of Manufacturer.	Name of Fertilizer.	Place of Sampling (and Sampler when not the College.)
13646	The Hubbard Fertz. Co., Baltimore, Md.	Climax Bone Super Phosphate.	Cecilton (J. A. Pierce.)
13654	" " "	Climax Bone Super Phosphate.	Baltimore (J. T. Morris.)
13725	" " "	Farmers' I. X. L.....	Baltimore.....
13726	" " "	Gem Phosphate	Baltimore.....
13701	" " "	H. G. Sol. Tennessee Phosphate.	Walkersville.....
13702	" " "	Oriental Phosphate for Wheat and Grass.	Walkersville.....
13703	" " "	Soluble Bone and Potash..	Walkersville.....
13704	" " "	Special Mixture Bone and Potash.	Woodsboro.....
13652	" " "	Special Mixture Bone and Potash.	Baltimore (J. T. Morris.)
13793	" " "	Stand. Bone Super Phos..	Baltimore.....
13794	" " "	Warranted Pure Raw Bone.	Baltimore.....
13863	" " "	Wheat Growers' Jewel...	Elk Mills
13810	M. P. Hubbard & Co., Baltimore, Md.	Beckley's Bone Mixture..	Halfway.....
13882	" " "	Excelsior Bone Phosphate.	Baltimore.....
13705	" " "	Farmers' Old Economy Phosphate.	Emmitsburg
13706	" " "	Fish Bone and Potash....	Emmitsburg
13811	" " "	Harvest King for Wheat and Grass.	Halfway.....
13812	" " "	Havana Special for Tobacco.	Halfway.....
13813	" " "	S. C. Bone Phosphate....	Wolfsville
13883	" " "	7% Bermuda Guano.....	Baltimore.....
13707	" " "	Sol. Bone and Potash for Wheat and Grass.	Emmitsburg
13884	Wilbur W. Hubbard, Chestertown, Md.	Our Victor Phosphate....	Barclay.....
13885	" " "	Peerless Fertilizer.....	Chestertown.....

No.	NITROGEN Calculated as AMMONIA.		POTASH K ₂ O.		PHOSPHORIC ACID.				Comparative Value per Ton Found.	Comparative Value per Ton Guaranteed.
	Found.	Guaranteed.	Found.	Guaranteed.	Insoluble.		Available.			
					Found.	Guaranteed.	Found.	Guaranteed.		
13646	1.26	1.00	4.35	4.00	1.15	.....	6.88	7.00	\$16.10	\$14.50
13654	1.50	1.00	4.18	4.00	1.65	.....	7.42	7.00	17.51	14.50
13725	2.25	2.00	2.04	2.00	1.35	.....	7.34	8.00	17.80	17.00
13726	0.96	0.50	1.20	1.00	2.40	.....	6.65	8.00	10.36	9.15
13701	.....	.....	.....	.....	0.75	.....	15.73	14.00	12.58	11.20
13702	1.38	1.00	1.55	1.00	1.58	.....	8.06	8.00	15.07	12.50
13703	.....	.....	2.35	2.00	1.85	.....	10.07	10.00	10.78	10.00
13704	.....	.....	4.05	4.00	1.53	.....	9.26	10.00	11.77	12.00
13652	.....	.....	3.40	4.00	2.03	.....	9.62	10.00	11.51	12.00
13793	2.18	2.00	3.34	3.00	1.38	.....	7.40	8.00	18.92	18.00
13794	4.85	4.50	.....	.....	24.25*	45.00†	.....	.....	30.45	.....
13863	1.71	1.50	2.51	2.00	2.43	.....	8.14	9.00	17.61	16.25
13810	1.81	1.50	.....	.....	1.63	.....	12.81	14.00	19.80	19.25
13882	1.35	1.00	2.39	2.00	1.55	.....	9.29	8.00	17.03	13.50
13705	0.67	0.50	2.04	2.00	1.40	1.00	9.42	8.00	12.21	10.35
13706	0.43	0.25	1.72	1.00	1.10	1.00	7.84	6.00	9.72	6.88
13811	1.49	1.00	2.93	3.00	1.48	1.00	9.04	10.00	17.78	16.90
13812	2.44	2.50	2.54	2.50	0.73	1.00	9.54	9.00	20.91	20.65
13813	.....	.....	.....	.....	0.58	.....	15.38	14.00	12.30	11.20
13883	5.30	7.00	5.50	4.00	1.95	.....	8.22	7.00	33.05	35.50
13707	.....	.....	2.04	2.00	1.08	2.00	10.53	10.00	10.68	10.40
13884	1.28	1.00	1.41	1.00	3.53	.....	8.54	8.00	15.84	12.50
13885	2.18	2.00	4.23	4.00	0.83	.....	9.40	8.00	21.59	19.00

*Total Phosphoric Acid. †Total Bone Phosphate.

No.	Name and Address of Manufacturer.	Name of Fertilizer.	Place of Sampling, (and Sampler, when not the College.)
13886	Wilber W. Hubbard, Ches-	Special Mixture.....	Rolph's Wharf
13695	tertown, Md. " "	Special Mixture.....	Kennedysville.....
13795	S. L. Lamberd Co., Balti-	Boss Fertilizer.....	(W. T. Jones.) Baltimore.....
13951	more, Md. " "	Favorite.	Baltimore.....
13952	" " "	Soft Ground Bone.....	Baltimore.....
13953	" " "	Special Anne Arundel Mix- ture.	Baltimore.....
13825	Joshua Linthicum, Annap-	Special Fish and Potash Mixture.	Savage.....
13887	olis, Md. Listers' Agr. Chem. Wks.,	Alkaline Bone.....	Baltimore.....
13826	Newark, N. J. " "	Bone Meal.....	Baltimore.....
13888	" " "	Celebrated Ground Bone	Baltimore.....
13889	" " "	Crop Producer.	Baltimore.....
13890	" " "	"G" Brand.....	Goldsboro.
13747	" " "	Harvest Queen.....	Gaithersburg.....
13748	" " "	Standard Pure Bone Super Phosphate.	Gaithersburg.....
13954	" " "	Special 10% Potato Fer- tilizer.	Baltimore.....
13827	Jos. Lister, Chicago, Ill...	Pure Bone Meal.....	Chewsville
13864	The D. B. Martin Co.,	Claremont Vegetable Grower.	Leslie.....
13865	Philadelphia, Pa. " "	Corn and Cereal Special..	Leslie.....
13749	" " "	Crop Producer.	Germantown
13866	" " "	Dissolved Organic Com- pound.	Leslie.....
13894	" " "	Extra Animal Bone and Potash.	Queen Anne.....
13867	" " "	Ground Bone.....	Leslie.....
13750	" " "	One, Eight and Four....	Boys.....

No.	NITROGEN Calculated as AMMONIA.		POTASH, K ₂ O.		PHOSPHORIC ACID.				Comparative Value per Ton Found.	Comparative Value per Ton Guaranteed.
	Found.	Guaranteed.	Found.	Guaranteed.	Insoluble.		Available.			
					Found.	Guaranteed.	Found.	Guaranteed.		
13886	1.35				4.55		9.70		\$16.25	
13695	1.35		2.03		1.75		8.98		16.44	
13795	1.54	2.00	4.23	4.50	1.70	1.00	9.36	6.50	19.66	\$18.40
13951	1.19	1.00	2.17	2.00	1.70	2.00	7.56	8.00	14.58	14.30
13952	3.11	3.00			6.28		4.37	11.00	17.77	21.50
13953	2.56	3.00	2.74	3.00	2.13	1.00	8.34	8.00	20.89	21.90
13825	1.66	2.00	3.18	3.00	0.73	1.00	7.51	6.00	16.79	16.40
13887			2.02	2.00	1.53		10.27	10.00	10.55	10.00
13826	4.88	3.25			23.25*	23.00*			31.33	
13888	3.50	3.25			11.98*	12.00*			20.42	
13889	1.37	1.00	1.18	1.00	1.43		7.54	7.00	14.09	11.50
13890	1.33	1.00	3.53	4.00	2.40		8.97	8.00	18.12	15.50
13747	1.98	1.50	2.12	2.00	2.20		9.42	9.00	19.35	16.25
13748	3.26	3.00	2.22	2.00	2.38		9.99	9.00	24.57	21.50
13954	2.42	2.00	8.86	10.00	1.65		8.20	8.00	26.19	25.00
13827	3.58	4.66			24.90*	26.60*			31.81	
13864	3.01	3.00	3.42	5.00	2.33		8.89	7.00	23.78	22.50
13865	2.20	2.00	2.90	2.00	1.95		9.02	8.00	20.40	17.00
13749	1.35	1.25			3.85		9.62	10.00	15.89	14.38
13866	1.33	1.25	2.27	2.00	3.25		9.95	8.00	18.18	14.38
13894	1.84	2.00	2.57	2.50	14.23		9.10	16.00	23.80	25.50
13867	2.68	2.00			26.00*	50.00†			31.06	
13750	1.64	1.00	4.07	4.00	2.50		8.28	8.00	19.09	15.50

*Total Phosphoric Acid. †Total "Bone Phosphate."

No.	Name and Address of Manufacturer.	Name of Fertilizer.	Place of Sampling (and Sampler, when not the College.)
13895	The D. B. Martin Co., Philadelphia, Pa.	Potash and Soluble Bone Compound.	Still Pond.
13751	" " "	Pure Dissolved Animal Bone.	Germantown.
13955	" " "	Raw Bone Meal.	White Marsh.
13752	" " "	Sure Grower.	Germantown.
13743	Mayfield & Brown, Georgetown, D. C.	Pure Ground Bone.	White's Ferry.
13814	F. Mehring, Bruceville, Md.	Acid Phosphate.	Wolfsville.
13753	" " "	Dissolved Raw Bone.	Bruceville.
13754	" " "	General Crop Grower.	Bruceville.
13755	" " "	Twenty-six Dollar Phosphate.	Bruceville.
13828	Miller Fertilizer Co., Baltimore, Md.	Ammoniated Diss. Bone..	Point of Rocks.
13829	" " "	Buyers' Mixture.	Ellicott City.
13815	" " "	Clinch Phosphate, Rock and Potash.	Keedysville.
13830	" " "	Club Brand.	Ellicott City.
13831	" " "	Dissolved Raw Bone.	Ellicott City.
13832	" " "	Ground Bone.	Ellicott City.
13756	" " "	Harvest Queen.	Lineboro.
13757	" " "	Hustler Phosphate.	Lineboro.
13945	" " "	Potato and Vegetable Grower.	Two Johns.
13891	" " "	S. C. Rock.	Highland.
13892	" " "	Special Mixture.	Baltimore.
13893	" " "	Standard Phosphate.	Downes.
13758	" " "	W. G. Phosphate.	Dickerson.
13956	Geo. R. Mowell, Glencoe, Md.	Standard Bone Phosphate.	Baltimore.

No.	NITROGEN Calculated as AMMONIA.		POTASH, K ₂ O.		PHOSPHORIC ACID.				Comparative Value per Ton Found.	Comparative Value per Ton Guaranteed.
					Insoluble.		Available.			
	Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.		
13895	.....	.....	2.49	3.00	0.55	.....	13.05	12.00	\$13.04	\$12.60
13751	2.30	2.00	.....	.....	2.63	.....	13.53	12.00	22.63	19.00
13955	4.28	4.50	.....	.....	24.40*	48.00†	.....	.....	31.97	.....
13752	1.30	1.00	1.61	1.00	3.58	.....	8.96	8.00	16.55	12.50
13743	4.88	4.50	.....	.....	21.88*	47.00†	.....	.....	34.34	.....
13814	.....	.....	.....	.....	3.68	1.00	15.00	14.00	12.00	11.20
13753	2.39	2.00	.....	.....	0.73	1.00	16.02	14.00	24.68	21.40
13754	1.19	1.00	1.28	1.25	4.65	1.00	11.70	11.00	19.01	16.15
13755	1.62	1.25	1.50	1.00	5.48	1.00	11.88	12.00	21.24	17.78
13828	1.74	2.00	2.16	2.00	1.73	1.50	8.95	8.00	17.89	17.60
13829	.....	.....	3.60	3.00	0.90	.....	11.09	10.00	12.65	11.00
13815	.....	.....	2.40	2.00	1.60	2.00	9.67	10.00	10.46	10.40
13830	0.84	0.50	2.06	2.00	1.28	1.50	9.15	8.00	12.58	10.45
13831	2.68	2.50	.....	.....	2.88	2.00	11.99	11.00	22.52	20.55
13832	3.16	3.00	.....	.....	20.75*	13.00*	.....	.....	26.96	.....
13756	1.26	1.25	3.75	2.75	1.18	.....	9.47	9.00	18.10	16.13
13757	1.37	1.00	1.23	1.00	0.80	.....	8.37	8.00	14.72	12.50
13945	1.83	2.00	5.00	4.00	1.00	.....	9.15	8.00	20.96	19.00
13891	.....	.....	.....	.....	0.53	.....	14.63	14.00	11.70	11.20
13892	.....	.....	2.75	3.00	0.85	.....	12.32	12.00	12.78	12.60
13893	2.71	3.00	3.01	3.00	1.58	.....	8.61	8.00	21.74	21.50
13758	0.84	0.50	1.27	1.00	1.05	1.50	8.58	7.00	11.28	8.65
13956	1.86	2.00	2.04	2.00	1.45	1.00	10.41	10.00	19.54	19.40

*Total Phosphoric Acid. †Total Bone Phosphate.

No.	Name and Address of Manufacturer.	Name of Fertilizer.	Place of Sampling, (and Sampler, when not the College.)
13759	G. Ober & Sons' Co., Baltimore, Md.	Dissolved Animal Bone...	Taneytown.....
13760	" " "	Dissolved Bone Phosphate	New Windsor
13833	" " "	Dis. Bone Phosphate and Potash.	Baltimore
13761	" " "	Farmers' Mixture.....	New Windsor.....
13834	" " "	Farmers' Standard Ammoniated Phosphate.	Baltimore
13681	" " "	Farmers' Standard Ammoniated Phosphate.	Preston
13957	" " "	Fish and Potash	(F. J. Gadow) Baltimore
13958	" " "	Fish Bone and Potash....	Baltimore
13896	" " "	Geo. E. Thawley's Special Wheat Formula No. 1.	Price.....
13763	" " "	Independent Ammo. Super Phosphate.	New Windsor
13897	" " "	Princeton Complete Compound.	Fallston.....
13835	" " "	Pure Bone Meal.....	Baltimore
13959	" " "	Pure Raw Bone Meal	Baltimore
13836	" " "	Soluble Ammoniated Super Phos. of Lime.	Baltimore
13960	" " "	Special Plant Food.....	Cockeysville
13961	" " "	Standard Potash Compound.	Baltimore.....
13670	" " "	Standard Potash Compound.	Longwoods.....
13764	Patapsco Guano Co., Baltimore, Md.	Baltimore Soluble Phos..	(F. M. Willis) Greenmount.....
13898	" " "	Buyer's Mixture.....	Church Hill
13765	" " "	Coon Brand Guano.....	Germantown
13816	" " "	Edw. Snowden Diss. S. C. Bone.	Millstone.....
13727	" " "	Grain and Grass Producer	Baltimore
13899	" " "	Grange Mixture.....	Queen Anne.....

No.	NITROGEN Calculated as AMMONIA.		POTASH, K ₂ O.		PHOSPHORIC ACID.				Comparative Value per Ton Found.	Comparative Value per Ton Guaranteed.
	Found.	Guaranteed.	Found.	Guaranteed.	Insoluble.		Available.			
					Found.	Guaranteed.	Found.	Guaranteed.		
13759	2.93	3.00	.....	.....	2.28	.....	13.18	10.00	\$24.35	\$20.50
13760	.....	.....	.....	.....	0.98	.....	15.33	14.00	12.26	11.20
13833	.....	“0”	2.80	2.00	0.98	.....	10.70	10.00	11.56	10.00
13761	1.25	1.00	2.36	2.00	2.00	.....	9.54	9.00	17.08	14.50
13834	2.25	2.00	2.37	2.00	1.23	.....	10.50	9.00	21.24	18.00
13681	2.01	2.00	2.63	2.00	1.75	.....	9.82	9.00	20.19	18.00
13957	2.66	2.00	2.56	2.00	2.08	.....	9.25	9.00	21.95	18.00
13958	2.34	3.25	3.09	3.50	1.88	.....	11.81	8.00	23.84	22.88
13896	1.13	1.00	2.23	2.00	1.30	.....	10.54	9.00	17.25	14.50
13763	1.30	1.00	1.60	1.00	1.53	.....	8.91	8.00	15.67	12.50
13897	2.15	2.00	4.04	4.00	1.10	2.00	10.22	8.00	22.23	19.80
13835	3.36	3.00	.....	.....	24.64*	22.00*	.....	.....	32.14	.....
13959	4.68	4.00	.....	.....	20.80*	21.00*	.....	.....	29.19	.....
13836	2.03	2.00	2.31	2.00	1.28	.....	10.96	8.00	20.89	17.00
13960	2.42	2.00	5.80	5.00	1.10	.....	9.98	9.00	24.69	21.00
13961	.....	.....	3.50	5.00	1.23	.....	13.91	12.00	14.88	14.60
13670	.....	.....	5.02	5.00	1.85	.....	13.50	12.00	16.19	14.60
13764	.....	.....	2.16	2.00	0.93	.....	11.26	11.00	11.36	10.80
13898	.....	.....	3.28	3.00	0.98	.....	12.12	12.00	13.18	12.60
13765	1.35	1.00	3.12	3.00	1.38	.....	8.74	9.00	17.14	15.50
13816	.....	.....	.....	.....	1.35	.....	14.67	14.00	11.74	11.20
13727	1.23	1.00	4.16	4.00	1.23	.....	8.07	8.00	17.03	15.50
13899	2.08	2.00	2.45	2.00	1.95	.....	7.64	8.00	18.13	17.00

*Total Phosphoric Acid. †Total Bone Phosphate.

No.	Name and Address of Manufacturer.	Name of Fertilizer.	Place of Sampling, (and Sampler, when not the College.)
13766	Patapsco Guano Co., Baltimore, Md.	H. G. Rock and Potash ..	Germantown
13962	" " "	Peninsula Potash Mixture	Baltimore
13963	" " "	Phospho-Potash	Baltimore
13728	" " "	Pure Diss. S. C. Bone....	Baltimore
13644	" " "	Pure Diss. S. C. Bone....	Cambridge
13964	" " "	Pure Ground Bone	(T. Harry Hopkins) Cockeysville.....
13796	" " "	Sea Gull Guano	Baltimore
13767	" " "	Soluble Bone and Potash.	Greenmount
13768	" " "	Special Wheat Compound.	Greenmount
13902	Piedmont-Mt. Airy Guano Co., Baltimore, Md.	Caroline Mixture	Greensboro
13729	" " "	Dissolved Bone Phosphate and Potash.	Baltimore
13797	" " "	Excelsior	Baltimore
13965	" " "	Farmers' Favorite	Baltimore
13708	" " "	Farmers' H. G. Bone and Potash.	Mt. Airy
13730	" " "	H. G. S. C. Bone	Baltimore
13904	" " "	Insula Guano	Queen Anne
13842	" " "	Levering's Ammo. Bone.	Baltimore
13679	" " "	Levering's Ammo. Bone.	Greensboro
13903	" " "	Levering's Excelsior	(W. E. Orrell) Greensboro
13693	" " "	Levering's Excelsior	Greensboro
13843	" " "	Levering's Excelsior	(J. T. Pinder) Greensboro
13905	" " "	Levering's Harvest Queen. Levering's I. X. L. Crop Grower.	Baltimore
13731	" " "	Levering's Standard	Baltimore

No.	NITROGEN Calculated as AMMONIA.		POTASH, K ₂ O.		PHOSPHORIC ACID.				Comparative Value per Ton Found.	Comparative Value per Ton Guaranteed.
					Insoluble.		Available.			
	Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.		
13766	.....	.....	4.72	5.00	0.88	.....	11.39	11.00	\$14.01	\$13.80
13962	.....	.....	5.20	5.00	1.25	.....	12.65	12.00	15.57	14.60
13963	.....	.....	3.10	3.00	0.70	1.00	7.27	6.00	9.06	8.00
13728	.....	.....	.....	.....	1.13	.....	14.47	14.00	11.58	11.20
13644	.....	.....	.....	.....	0.75	.....	14.68	14.00	11.74	11.20
13964	4.23	4.50	.....	.....	21.50*	45.00†	.....	.....	28.48	.....
13796	1.31	1.00	1.34	1.00	1.78	.....	7.50	8.00	14.14	12.50
13767	.....	.....	2.30	2.00	0.93	.....	10.45	10.00	10.85	10.00
13768	2.34	2.25	2.88	2.50	2.25	.....	11.31	9.00	23.28	19.38
13902	1.26	1.00	2.40	2.00	0.65	.....	8.32	8.00	15.39	13.50
13729	.....	.....	1.51	1.00	0.35	1.00	10.80	10.50	10.22	9.60
13797	1.19	1.00	1.55	1.00	0.28	.....	9.30	8.00	15.13	12.50
13965	1.13	1.00	4.02	4.00	0.40	.....	8.81	8.00	16.95	15.50
13708	.....	.....	1.89	2.00	0.30	1.00	10.23	10.00	10.13	10.20
13730	.....	.....	.....	.....	0.20	1.00	13.03	14.00	10.42	11.20
13904	0.58	0.50	2.01	2.00	0.80	.....	8.41	7.00	10.93	9.35
13842	1.37	1.00	3.63	3.00	1.35	1.00	9.12	9.00	18.09	15.90
13679	1.67	1.00	3.74	3.00	0.88	.....	8.36	9.00	18.30	15.50
13963	1.28	1.00	1.80	1.00	0.73	.....	8.86	8.00	15.43	12.50
13693	1.23	1.00	1.45	1.00	0.60	.....	9.47	8.00	15.47	12.50
13843	1.31	1.00	3.00	2.00	0.58	1.00	7.76	8.00	15.58	13.90
13905	.....	.....	3.06	3.00	0.55	1.00	10.03	10.00	11.19	11.20
13731	2.13	2.00	2.77	3.00	0.50	1.00	8.52	8.00	18.95	18.40

*Total Phosphoric Acid. †Total Bone Phosphate.

No.	Name and Address of Manufacturer.	Name of Fertilizer.	Place of Sampling, (and Sampler, when not the College.)
13709	Piedmont-Mt. Airy Guano Co., Baltimore, Md.	Peerless Phosphate	Mt. Airy
13906	" " "	Piedmont Perfection Guano.	Greensboro
13911	" " "	Piedmont Special Potash Mixture.	Queen Anne
13907	" " "	Plow Brand	Baltimore
13974	" " "	Pure Raw Bone Mixture.	Baltimore
13798	" " "	Raw Bone Meal	Baltimore
13909	" " "	Royal Ammoniated Bone and Potash.	Baltimore
13910	" " "	Soluble Bone and Potash.	Greensboro
13658	" " "	Special Mixture	Denton
13710	" " "	Special Wheat and Grass Phosphate.	(R. T. Carter) Mt. Airy
13711	" " "	Standard Dissolved Bone Phosphate.	Mt. Airy
13799	" " "	Wheat Compound	Baltimore
13733	The Pollock Fertilizer Co., Baltimore, Md.	Ammoniated Bone Phos..	Baltimore
13734	" " "	Dissolved S. C. Bone	Baltimore
13712	" " "	Owl Brand Guano	Emmitsburg
13640	" " "	Soft Ground Bone	Ridge
13690	" " "	Soluble Bone and Potash.	(C. C. Ricards) Vienna
13900	" " "	Soluble Bone Phosphate..	(E. Hoerniche) Wye Station
13713	" " "	Special Wheat Grower ..	Emmitsburg
13901	" " "	Superior Corn and Tomato Fertilizer.	Church Hill
13714	" " "	Victor Bone Phosphate ..	Emmitsburg
13912	L. M. Price, Smyrna, Del..	Corbit's Mixture	Black's Station
13913	" " "	Farmers' Phosphate	Black's Station

No.	NITROGEN Calculated as AMMONIA.		POTASH, K ₂ O.		PHOSPHORIC ACID.				Comparative Value per Ton Found.	Comparative Value per Ton Guaranteed.
	Found.	Guaranteed.	Found.	Guaranteed.	Insoluble.		Available.			
					Found.	Guaranteed.	Found.	Guaranteed.		
13709	1.26	1.00	2.04	1.50	0.60	1.00	8.85	8.00	\$15.54	\$13.40
13906	2.03	2.00	5.20	5.00	0.45	.....	8.70	8.00	21.19	20.00
13911	.....	.....	5.17	5.00	0.20	1.00	9.62	10.00	12.91	13.20
13907	2.01	2.00	2.74	2.00	1.08	.....	7.66	8.00	17.87	17.00
13974	1.19	1.25	2.28	1.50	0.70	.....	8.50	8.00	15.23	13.88
13798	3.96	4.00	.....	.....	24.45*	40.00†	.....	.....	32.53	.....
13909	1.26	1.30	3.67	3.00	0.73	1.00	6.58	6.00	14.95	13.95
13910	.....	.....	2.05	2.00	0.18	.....	7.89	8.00	8.45	8.40
13658	1.22	1.00	5.37	5.00	0.78	.....	8.92	10.00	18.87	18.50
13710	1.91	2.00	2.31	2.00	0.58	1.00	8.64	8.50	17.87	17.90
13711	1.28	1.00	3.01	2.00	0.63	1.50	10.06	10.00	17.80	16.10
13799	.....	.....	5.48	5.00	0.13	.....	11.67	12.00	14.85	14.60
13733	2.35	2.00	2.31	2.00	1.53	1.00	7.89	8.00	19.04	17.40
13734	.....	.....	.....	.....	1.88	1.00	14.03	14.00	11.22	11.20
13712	0.75	0.50	2.36	1.50	1.38	1.00	8.01	7.00	11.68	9.05
13640	2.61	3.00	.....	.....	15.91*	14.00	.....	.....	19.63	.....
13690	.....	.....	5.02	5.00	0.65	1.00	12.98	12.00	15.53	14.80
13900	.....	.....	2.16	2.00	1.25	1.00	10.27	10.00	10.63	10.20
13713	1.04	1.00	2.17	2.00	1.55	1.00	7.85	8.00	14.28	13.90
13901	1.19	1.00	2.09	2.00	1.28	.....	8.06	8.00	14.83	13.50
13714	.....	.....	1.06	1.00	1.23	1.00	9.28	9.00	8.73	8.40
13912	.....	.....	4.63	5.00	0.25	.....	12.26	12.00	14.49	14.60
13913	1.71	1.50	4.19	4.00	2.85	.....	8.13	9.00	19.45	18.25

*Total Phosphoric Acid. †Total Bone Phosphate.

No.	Name and Address of Manufacturer.	Name of Fertilizer.	Place of Sampling, (and Sampler, when not the College.)
13914	L. M. Price, Smyrna, Del.	L. & P. Phosphate.....	Kennedysville.....
13715	Ramsburg Fertilizer Co., Frederick, Md.	Alkaline Phosphate.....	Frederick
13716	" " "	Ammo. Bone Phosphate..	Monrovia.....
13664	" " "	Ammo. Bone Phosphate..	Frederick
13769	" " "	Corn and Potato Fert....	(W. O. Glaze) Silver Spring.....
13770	" " "	Dissolved Animal Bone..	Barnesville.....
13717	" " "	Dissolved Bone Super Phosphate.	Monrovia.....
13718	" " "	Excelsior Half-and-Half..	Mt. Airy.....
13719	" " "	Excelsior Plant Food.....	Monrovia.....
13837	" " "	Old Virginia Compound ..	Walkersville
13720	" " "	Queen	Monrovia.....
13800	Rasin-Monumental Co., Baltimore, Md.	Ammo. Super Phosphate.	Baltimore
13801	" " "	Arundel Complete	Fairfield.....
13915	" " "	Monumental Acid Phos...	Baltimore.....
13772	" " "	Rasin's Acid Phosphate..	Silver Spring.....
13773	" " "	Rasin's Bone and Potash.	Melrose
13771	" " "	Rasin's Dissolved Bone..	Gaithersburg.....
13802	" " "	Rasin's Empire Guano....	Baltimore.....
13838	" " "	Rasin's I. X. L. Fert....	Baltimore.....
13916	" " "	Seneca Complete	Baltimore.....
13803	" " "	Soluble Bone Phosphate and Potash.	Fairfield.....
13804	" " "	Special Bone and Potash.	Baltimore.....
13647	" " "	Special Bone and Potash.	Federalsburg
			(S. S. Smith)

No.	NITROGEN Calculated as AMMONIA.		POTASH, K ₂ O.		PHOSPHORIC ACID.				Comparative Value per Ton Found.	Comparative Value per Ton Guaranteed.
	Found.	Guaranteed.	Found.	Guaranteed.	Insoluble.		Available.			
					Found.	Guaranteed.	Found.	Guaranteed.		
13914	0.85	1.00	2.60	3.00	1.63	.....	8.59	9.00	\$ 12.78	\$15.50
13715	.....	.....	1.82	2.00	2.43	2.00	11.36	10.00	11.40	10.40
13716	1.16	1.00	2.06	2.00	2.23	2.00	9.39	10.00	16.40	16.30
13664	1.19	1.00	2.65	2.00	2.25	2.00	9.69	10.00	17.41	16.30
13769	1.51	1.50	2.02	2.00	3.00	2.00	9.90	9.00	18.41	17.05
13770	2.12	2.00	.....	.....	6.45	3.00	10.86	10.00	20.86	18.20
13717	.....	.....	.....	.....	2.68	2.00	14.01	14.00	11.21	11.20
13718	1.01	1.00	1.02	1.00	3.73	2.00	11.46	10.00	17.51	15.30
13719	2.03	2.00	2.06	2.00	1.95	.....	10.99	9.00	20.94	18.00
13837	1.83	1.50	2.32	2.00	2.90	2.00	10.01	9.00	19.90	17.05
13720	0.60	0.50	1.25	1.00	1.83	2.00	10.40	8.00	12.04	9.55
13800	1.81	~~2.95~~ 1.00	~~1.00~~ 2.45	1.00	1.63	1.00	8.27	8.00	18.21	12.90
13801	2.01	2.00	2.88	2.00	1.53	.....	8.32	8.00	18.85	17.00
13915	.....	.....	.....	.....	0.68	1.00	14.54	14.00	11.63	11.20
13772	.....	.....	.....	.....	0.73	1.00	14.43	14.00	11.55	11.20
13773	.....	.....	2.28	2.00	0.75	1.00	10.28	10.00	10.65	10.20
13771	1.66	2.00	.....	.....	2.55	1.50	10.04	10.00	16.87	17.60
13802	1.95	2.00	3.00	2.00	1.55	1.00	8.35	8.00	18.80	17.40
13838	1.37	1.00	3.11	3.00	1.30	1.00	9.20	9.00	17.63	15.90
13916	1.01	1.00	3.92	4.00	0.83	1.00	8.93	8.00	16.72	15.90
13803	.....	.....	2.41	2.00	0.90	1.00	10.03	10.00	10.61	10.20
13804	.....	.....	4.87	5.00	0.53	1.00	10.17	10.00	13.12	13.20
13647	.....	.....	5.01	5.00	0.43	1.00	11.62	10.00	14.40	13.20

No.	Name and Address of Manufacturer.	Name of Fertilizer.	Place of Sampling, (and Sampler, when not the College.)
13649	Rasin-Monumental Co., Baltimore, Md.	Special Bone and Potash.	Longwoods..... (H. M. Ziegler)
13839	" " "	Special Fish and Potash Mixture.	Laurel.....
13917	" " "	Special Formula for Corn and Tomatoes.	Pocomoke City....
13648	" " "	Special Mixture.....	Longwoods..... (H. M. Ziegler)
13840	" " "	Special Mixture for Vines and Vegetables.	Baltimore.....
13805	" " "	Tuscarora Ammo. Bone..	Fairfield.....
13943	" " "	Wm. Penn Crop Grower..	Princess Anne....
13841	" " "	XXX Fertilizer.....	Baltimore.....
13966	W. E. Robinson, Bel Air, Md.	Vegetable Fertilizer.....	Bradshaw.....
13774	Chas. Schaeffer, Westminster, Md.	Big Gun.....	Westminster.....
13775	" " "	Governor.....	Westminster.....
13672	" " "	Kainit.....	Silver Run..... (W. T. Halter)
13776	" " "	Leader.....	Westminster.....
13674	" " "	Muriate of Potash.....	Silver Run..... (W. T. Halter)
13777	" " "	P. A. P. Phosphate.....	Westminster.....
13671	" " "	S. C. Rock.....	Silver Run..... (W. T. Halter)
13778	" " "	Super A.....	Westminster.....
13673	" " "	Tankage.....	Silver Run..... (W. T. Halter)
13918	The Scott Fertilizer Co., Elkton, Md.	Bush River Compound...	Aberdeen.....
13869	" " "	Grain Special.....	Childs.....
13870	" " "	Sure Growth.....	Rising Sun.....
13871	" " "	Tip Top and Potash.....	Rising Sun.....
13872	" " "	Tip Top Soluble Bone....	Rising Sun.....

No.	NITROGEN Calculated as AMMONIA.		POTASH, K ₂ O.		PHOSPHORIC ACID.				Comparative Value per Ton Found.	Comparative Value per Ton Guaranteed.
	Found.	Guaranteed.	Found.	Guaranteed.	Insoluble.		Available.			
					Found.	Guaranteed.	Found.	Guaranteed.		
13649	.....	.....	5.08	5.00	0.63	1.00	12.77	12.00	\$15.43	\$14.80
13839	2.13	2.00	3.40	3.00	1.08	.....	5.65	6.00	16.94	16.00
13917	.....	.....	2.50	3.00	1.40	1.00	6.54	6.00	8.01	8.00
13648	1.33	1.00	5.30	5.00	0.70	.....	12.10	11.00	22.34	19.50
13840	1.23	1.00	8.34	8.00	0.50	1.00	9.02	8.00	21.87	19.90
13805	1.54	1.00	3.85	2.00	1.23	1.00	8.73	9.00	18.46	14.90
13943	1.33	1.00	1.34	1.00	2.80	.....	6.25	8.00	13.37	12.50
13841	2.08	2.00	5.01	5.00	1.05	1.00	8.60	8.00	21.31	20.40
13966	1.60	2.00	2.17	2.00	1.88	.....	8.03	9.00	16.55	18.00
13774	2.30	2.00	2.17	2.00	1.40	.....	10.78	10.00	21.56	19.00
13775	1.71	1.50	2.38	2.50	1.15	.....	10.07	9.00	18.90	16.75
13672	.....	.....	12.50	12.00	.....	.....	.....	.....	.....	.....
13776	1.26	1.00	1.94	1.50	1.13	.....	8.78	8.00	15.58	13.00
13674	.....	.....	49.10	50.00	.....	.....	.....	.....	.....	.....
13777	.....	.....	2.65	2.00	0.48	.....	11.54	10.00	11.98	10.00
13671	.....	.....	.....	.....	0.78	.....	15.72	14.00	12.58	11.20
13778	1.04	0.75	1.31	1.00	2.30	.....	8.27	8.00	14.14	10.03
13673	10.78	10.00	.....	.....	6.20*	.....	.....	.....	36.06	30.00
13918	4.03	4.00	6.76	7.00	5.75	.....	5.77	7.00	28.94	28.00
13869	0.73	0.50	5.60	4.00	1.33	.....	8.58	10.00	15.29	13.75
13870	2.25	2.00	3.23	2.50	1.78	2.00	11.70	10.00	23.52	20.30
13871	.....	.....	2.24	2.00	3.75	.....	11.02	11.00	11.81	10.80
13872	.....	.....	.....	.....	1.23	.....	15.22	14.00	12.18	11.20

*Total Phosphoric Acid.

No.	Name and Address of Manufacturer.	Name of Fertilizer.	Place of Sampling, (and Sampler, when not the College.)
13873	The Scott Fertilizer Co., Baltimore, Md.	12 & 5 Soluble Bone.....	Childs.....
13874	" " "	Wheat and Grass Grower	Rising Sun.....
13682	M. L. Shoemaker, Philadelphia, Pa.	Swift Sure Guano.....	Ridgely..... (J. M. Short)
13844	C. F. Smith, Ridgely, Md.	Ammo. Super Phosphate.	Baltimore.....
13845	" " "	Standard Super Phos.....	Baltimore.....
13694	Smith, Rouse & Webster, Bel Air, Md.	Fish Tankage.....	Fulford..... (F. H. Jacobs)
13919	" " "	Formula No. 1 Wheat and Grass Grower.	Sharon.....
13920	" " "	Formula No. 2 Wheat and Grass Grower.	Perryman.....
13779	Southern Fertilizer Co., York, Pa.	Dissolved Animal Bone...	Rockville.....
13735	" " "	Dissolved Bone Phosphate	Baltimore.....
13780	" " "	Farmers' Choice Brand ..	Rockville.....
13736	" " "	Farmers' Mixture	Baltimore.....
13781	" " "	General Crop Grower	Melrose
13846	" " "	Ox Brand Ammoniated Dissolved Bone.	Point of Rocks....
13921	" " "	Ox Brand Ammoniated Dissolved Bone.	Sharon.....
13782	" " "	Ox Brand Bone and Potash Mixture.	Rockville.....
13783	" " "	Pure Ground Bone.....	Rockville.....
13737	" " "	Royal Wheat and Grass Grower.	Baltimore.....
13738	" " "	Soluble Bone and Potash.	Baltimore.....
13972	H. S. Stouffer, New Windsor, Md.	Butcher House Phosphate	Uniontown.....
13785	" " "	Wheat Grower Phosphate	New Windsor
13922	W. H. Street & Co., Fallston, Md.	Ammo. Dissolved Bone ..	Rocks.....
13923	" " "	H. G. Bone Phosphate...	Belcamp

No.	NITROGEN Calculated as AMMONIA.		POTASH, K ₂ O.		PHOSPHORIC ACID.				Comparative Value per Ton Found.	Comparative Value per Ton Guaranteed.
					Insoluble.		Available.			
	Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.		
13873	.....	.....	4.79	5.00	1.63	.....	13.48	12.00	\$ 15.90	\$14.60
13874	0.55	0.50	3.06	2.00	3.68	2.00	7.97	10.00	12.11	12.15
13682	2.39	2.00	6.08	5.00	2.03	.....	8.95	8.00	24.21	20.00
13844	0.82	0.50	4.07	3.00	2.78	.....	9.03	9.00	14.72	11.95
13845	1.59	1.50	3.93	3.00	2.13	.....	8.04	8.00	18.39	16.25
13694	10.43	11.00	.....	.....	9.56*	.....	.....	.....	37.02	33.00
13919	1.84	2.00	2.40	2.00	1.75	1.50	9.42	9.00	18.96	18.60
13920	1.08	1.00	2.31	2.00	1.20	1.50	10.32	8.00	16.89	14.10
13779	2.70	2.00	.....	.....	2.35	.....	12.94	10.00	23.33	17.00
13735	.....	.....	.....	.....	1.70	.....	14.14	14.00	11.31	11.20
13780	1.25	1.00	2.07	2.00	1.23	.....	9.26	9.00	16.20	14.50
13736	.....	.....	2.01	2.00	0.90	.....	10.12	10.00	10.29	10.00
13781	0.84	0.50	2.20	2.00	1.35	.....	8.10	8.00	12.16	10.15
13846	2.08	2.00	3.65	2.50	2.00	.....	7.07	10.00	18.80	19.00
13921	2.20	2.00	2.90	2.50	1.63	.....	9.77	10.00	21.02	19.50
13782	.....	.....	2.60	2.00	0.88	.....	8.29	8.00	9.41	8.40
13783	4.37	4.00	.....	.....	16.53*	40.00†	.....	.....	26.21	.....
13737	0.85	0.50	1.29	1.00	1.50	.....	8.61	8.00	11.46	9.15
13738	.....	.....	2.04	2.00	0.95	.....	11.18	11.00	11.17	10.80
13972	0.55	0.75	3.68	2.50	2.98	1.00	10.68	8.00	14.75	11.73
13785	0.58	0.50	3.70	2.50	2.68	.....	10.76	7.50	14.88	10.25
13922	1.51	1.50	2.75	2.00	1.73	1.50	9.19	9.00	17.92	16.85
13923	2.58	2.50	3.82	3.00	1.75	1.50	8.21	8.00	21.76	20.35

*Total Phosphoric Acid.

†Total Bone Phosphate.

No.	Name and Address of Manufacturer.	Name of Fertilizer.	Place of Sampling, (and Sampler, when not the College.)
13924	W. H. Street & Co., Fallston, Md.	S. C. Rock.....	Fallston.....
13721	J. W. Sullivan, Monrovia, Md.	Sullivan's S. S. S.....	Monrovia.....
13850	E. A. Talbott, Ellicott City, Md.	Ammoniated Bone Phos..	Ellicott City.....
13851	" " "	Grain and Grass Grower.	Ellicott City.....
13847	H. S. Taveau & Co., Baltimore, Md.	Bone Compound.....	Baltimore.....
13848	" " "	Florida Phosphate.....	Baltimore.....
13973	" " "	Special Wheat Mixture..	Baltimore.....
13817	D. A. Thomas, Hagerstown, Md.	Bone Mixture.....	Hagerstown.....
13818	I. P. Thomas & Sons, Philadelphia, Pa.	S. C. Phosphate.....	Hancock.....
13819	" " "	Raw and Acidulated Bone	Hancock.....
13929	W. B. Tighman & Co., Salisbury, Md.	Bone and Tankage Mixt..	Salisbury.....
12926	" " "	Fish Bone and Potash Mixture.	Salisbury.....
13927	" " "	Fish Mixture.....	Salisbury.....
13928	" " "	Mixture "B".....	Salisbury.....
13929	E. S. Truitt & Co., Salisbury, Md.	Bone Tankage and Fish Mixture.	Salisbury.....
13852	Turner & Son, Betterson, Md.	(B) Bone Phosphate for Wheat and Grass.	Baltimore.....
13739	Tuscarora Fertilizer Co., Baltimore, Md.	Alkaline.....	Baltimore.....
13853	" " "	Ammoniated Phosphate..	Baltimore.....
13806	" " "	Animal Bone.....	Baltimore.....
13930	" " "	Big Four (4).....	Belcamp.....
13854	" " "	Bone and Potash.....	Baltimore.....
13967	" " "	Cereal Phosphate.....	Baltimore.....
13807	" " "	Raw Bone Meal.....	Baltimore.....

No.	NITROGEN, Calculated as AMMONIA.		POTASH, K ₂ O.		PHOSPHORIC ACID.				Comparative Value per Ton Found.	Comparative Value per Ton Guaranteed.
	Found.	Guaranteed.	Found.	Guaranteed.	Insoluble.		Available.			
					Found.	Guaranteed.	Found.	Guaranteed.		
13924	.....	.....	.....	.....	1.00	.....	15.02	14.00	\$12.02	\$11.20
13721	2.24	2.00	2.52	2.00	1.53	.....	8.86	9.00	19.83	18.00
13850	1.54	1.00	2.35	2.00	2.00	2.00	8.55	8.00	17.09	14.30
13851	1.60	2.00	2.60	3.00	1.50	1.00	10.41	9.00	19.21	19.40
13847	1.25	1.00	2.32	2.00	1.55	.....	8.04	8.00	15.36	13.50
13848	.....	.....	.....	.....	1.15	.....	14.13	14.00	11.30	11.20
13973	.....	.....	2.70	2.50	1.03	1.00	11.20	10.00	11.87	10.70
13817	2.22	2.00	2.58	2.00	1.98	.....	10.02	10.00	21.16	19.00
13818	.....	.....	.....	.....	0.83	2.00	14.06	14.00	11.25	11.20
13819	2.49	2.00	.....	.....	10.38	.....	9.29	20.00	22.16	27.00
13925	1.91	2.00	1.84	2.00	1.60	.....	10.42	8.00	19.59	17.00
13926	0.89	1.00	1.73	2.00	0.73	.....	11.54	10.00	14.23	15.50
13927	2.02	2.00	2.26	2.00	0.88	.....	9.94	8.00	19.62	17.00
13928	3.11	4.00	4.50	3.00	2.05	.....	8.95	8.00	25.16	25.00
13929	2.03	2.00	2.51	2.00	1.73	2.00	7.90	7.00	18.21	16.80
13852	1.91	1.75	2.28	2.50	1.98	.....	10.05	10.00	19.81	18.63
13739	.....	.....	5.01	5.00	0.78	.....	10.15	10.00	13.29	13.00
13853	1.28	1.00	1.49	1.00	1.95	.....	7.01	7.00	13.76	11.50
13806	3.87	3.00	.....	.....	24.02*	24.00*	.....	.....	32.48	.....
13930	2.42	2.00	4.88	4.00	2.28	.....	7.28	7.00	21.54	18.00
13854	.....	.....	2.31	2.00	0.83	.....	10.66	10.00	11.01	10.00
13967	.....	.....	.....	.....	0.13	.....	11.60	10.00	9.28	8.00
13807	4.98	4.50	.....	.....	24.40*	22.00*	.....	.....	31.46	.....

*Total Phosphoric Acid.

No.	Name and Address of Manufacturer.	Name of Fertilizer.	Place of Sampling, (and Sampler, when not the College.)
13855	Tuscarora Fertilizer Co., Baltimore, Md.	Special Crop Grower.....	Baltimore.....
13946	" " "	Special Mixture.....	Secretary.....
13740	" " "	Standard Phosphate.....	Baltimore.....
13741	" " "	Sure Growth.....	Baltimore.....
13742	" " "	York State Special.....	Baltimore.....
13875	The J. E. Tygert Co., Phil- adelphia, Pa.	Ammoniated Super Phos- phate.	Childs.....
13876	" " "	Bone Phosphate.....	North East.....
13877	" " "	Standard Bone Phosphate	Childs.....
13722	J. Tyson & Son, Frederick, Md.	Ammoniated Super Phos- phate,	Walkersville.....
13786	" " "	Dissolved South Carolina Rock.	Dickerson.....
13787	" " "	Half and Half Super Phosphate.	Dickerson.....
13856	" " "	Special Mixture.....	Frederick.....
13663	" " "	Special Mixture.....	Frederick..... (W. O. Glaze)
13789	E. S. Valliant & Sons, Church Hill, Md.	Ideal Phosphate.....	Boys.....
13857	Virginia-Carolina Chemical Co., Richmond, Va.	Excelsior Ammoniated Phosphate.	Baltimore.....
13790	" " "	Guaranteed 14 Per Cent. Acid Phosphate.	Taneytown.....
13808	" " "	Special Bone and Potash.	Baltimore.....
13723	" " "	Standard Bone and Potash	Woodsboro.....
13947	S. L. Webster & Son., Cambridge, Md.	Bone and Potash.....	Two Johns.....
13948	" " "	No. 2 Ammoniated Bone Fertilizer.	Secretary.....
13949	" " "	Old Dorset Ammoniated Bone Fertilizer.	Lewes' Wharf.....
13677	" " "	Old Dorset Ammoniated Bone Fertilizer.	Preston..... (Z. T. Reynolds)
13950	" " "	Times Brand.....	Vienna.....

No.	NITROGEN Calculated as AMMONIA.		POTASH K ₂ O.		PHOSPHORIC ACID.				Comparative Value per Ton Found.	Comparative Value per Ton Guaranteed.
	Found.	Guaranteed.	Found.	Guaranteed.	Insoluble.		Available.			
					Found.	Guaranteed.	Found.	Guaranteed.		
13855	1.21	1.00	2.11	2.00	0.40	.....	8.84	8.00	\$15.35	\$13.50
13946	2.15	2.00	5.56	5.00	2.08	.....	9.36	8.00	23.28	20.00
13740	2.02	2.00	2.39	2.00	2.35	.....	7.85	8.00	18.25	17.00
13741	0.84	0.50	3.15	3.00	0.75	.....	8.42	8.00	12.98	11.15
13742	1.31	1.00	4.08	4.00	1.63	.....	8.16	8.00	17.48	15.50
13875	1.35	1.50	1.60	1.50	0.45	1.50	8.95	8.00	15.46	15.35
13876	1.84	2.25	2.76	2.50	1.23	2.00	9.51	9.00	19.20	20.18
13877	1.67	2.00	2.07	2.00	1.03	1.50	8.55	8.00	16.88	17.60
13722	1.35	1.00	1.57	2.00	2.23	.....	9.92	12.00	17.11	17.50
13786	.....	.....	.....	.....	0.83	.....	15.19	14.00	12.15	11.20
13787	0.94	1.25	1.50	1.00	2.08	.....	9.00	12.00	14.62	17.38
13856	1.09	1.00	1.61	1.00	1.78	.....	10.10	8.00	16.24	12.50
13663	1.35	1.00	2.03	1.00	1.43	.....	10.80	8.00	18.13	12.50
13789	1.43	1.00	2.60	2.00	1.80	2.00	9.01	9.00	17.35	15.30
13857	1.83	2.00	2.30	2.00	1.63	1.50	8.17	8.00	17.53	17.60
13790	.....	.....	.....	.....	0.68	1.00	14.46	14.00	11.52	11.20
13808	.....	.....	3.07	3.00	0.58	1.00	12.08	12.00	12.85	12.80
13723	.....	.....	2.64	2.00	1.33	1.00	9.83	10.00	10.77	10.20
13947	.....	.....	2.54	2.00	3.63	.....	6.64	10.00	8.58	10.00
13948	2.70	2.00	2.70	2.00	0.68	.....	8.56	8.00	20.98	17.00
13949	1.11	1.00	4.87	4.00	2.45	3.00	6.29	6.00	16.03	14.70
13677	1.19	1.00	4.42	4.00	3.15	3.00	6.46	6.00	16.31	14.70
13950	1.26	0.50	5.01	5.00	2.70	2.00	7.36	7.00	17.86	12.75

No.	Name and Address of Manufacturer.	Name of Fertilizer.	Place of Sampling (and Sampler, when not the College.)
13931	Harry W. Whistler, Fountain Green, Md.	Bone Meal.....	Forest Hill.....
13932	" " "	Crop Grower	Forest Hill.....
13933	O. M. Whitaker, Reckord, Md.	Complete Fertilizer.....	Forest Hill.....
13934	" " "	Fine Ground Raw Bone..	Bel Air.....
13935	Andrew Woodall, Georgetown, Md.	Alkaline Bone.....	Georgetown.....
13970	The Wooldridge Orchilla Co., Baltimore, Md.	Bizzy Bee Ammoniated and Potash Phosphate.	Baltimore.....
13971	" " "	Faultless Ammon. Bone Phosphate.	Baltimore.....
13936	" " "	Old Hickory Phosphate...	Baltimore.....
13937	" " "	Orchilla Guano.....	Pocomoke City....
13639	" " "	Orchilla Guano.....	Cambridge..... (W. H. Vordan)
13938	" " "	Tiger Bone Stock Phos...	Baltimore.....
13939	" " "	Virginia Bell Potash Mix.	Baltimore.....
13860	The Robt. A. Wooldridge Co., Baltimore, Md.	Champion Giant	Andora.....
13968	" " "	Chieftain Bone Stock Phosphate.	Baltimore.....
13858	" " "	Florida Acid Phosphate ..	Baltimore.....
13940	" " "	German Potash Mixture..	Centerville.....
13859	" " "	Liberty Bell	Baltimore.....
13941	" " "	Old Sledge Phosphate....	Baltimore.....
13969	" " "	Triumph Pure Bone Phos.	Baltimore.....
13942	" " "	Pure Raw Bone.....	Baltimore.....
13791	E. Wooten, White's Ferry, Md.	A. B. Phosphate.....	White's Ferry.....
13809	Wright & Lowe, Centerville, Md.	Enterprise Phosphate....	Baltimore.....

No.	NITROGEN Calculated as AMMONIA.		POTASH, K ₂ O.		PHOSPHORIC ACID.				Comparative Value per Ton Found.	Comparative Value per Ton Guaranteed.
	Found.	Guaranteed.	Found.	Guaranteed.	Insoluble.		Available.			
					Found.	Guaranteed.	Found.	Guaranteed.		
13931	2.58	2.00	.....	.....	24.66*	22.90*	.....	.....	\$29.93	.....
13932	2.18	1.50	3.80	2.00	2.55	.....	8.46	8.00	20.91	\$15.25
13933	2.17	2.00	2.50	2.00	1.90	.....	8.38	9.00	19.24	18.00
13934	4.57	4.00	.....	.....	21.34*	45.00†	.....	.....	26.20	.....
13935	.....	.....	3.17	3.00	.58	1.00	12.20	12.00	13.05	12.80
13970	1.25	1.00	1.38	1.00	.83	1.00	8.49	7.00	14.58	11.90
13971	2.01	2.00	2.44	2.00	1.08	2.00	8.90	8.00	18.81	17.80
13936	1.14	1.00	3.03	2.50	1.40	1.50	8.69	8.00	16.27	14.60
13937	.....	.....	.....	.....	14.19	13.00	5.13	4.00	9.78	8.40
13639	.....	.....	.....	.....	12.00	13.00	4.06	4.00	8.05	8.40
13938	1.26	1.25	5.10	4.50	.98	1.50	8.34	8.00	18.24	17.48
13939	.....	.....	2.72	3.00	.85	1.00	12.51	12.00	12.90	12.80
13860	1.33	1.00	2.18	2.00	1.38	1.50	9.63	9.00	17.02	15.10
13968	2.22	2.00	2.47	2.00	1.80	1.50	7.62	8.00	18.58	17.60
13858	.....	.....	.....	.....	.80	1.00	14.02	14.00	11.22	11.20
13940	.....	.....	2.19	2.00	.33	1.00	11.08	10.00	11.12	10.30
13859	.....	.....	3.18	3.00	.98	.....	11.96	12.00	12.95	12.60
13941	.....	.....	5.35	5.00	1.03	1.00	12.10	12.00	15.24	14.80
13969	1.71	1.50	4.29	4.00	1.88	2.00	7.68	8.00	18.71	18.05
13942	4.73	4.50	.....	.....	20.30*	45.00†	.....	.....	29.24	.....
13791	.58	.....	1.24	.....	2.40	.....	12.05	.....	13.39	.....
13809	1.31	1.00	2.56	2.00	1.83	.....	8.15	8.00	16.03	13.50

*Total Phosphoric Acid. †Total Bone Phosphate.

Table Showing Mechanical Analysis of Bone.

(The Chemical Analysis is Given in the Preceding Table.)

No.	NAME AND ADDRESS OF MANUFACTURER.	NAME OF FERTILIZER.	Fine Less than 1-50 inch.	Fine-Medium 1-25 to 1-30 inch.	Medium 1-25 to 1-12 inch.	Coarse Larger than 1-12 inch.
13450	American Agricultural Chemical Co., New York, N. Y.	Fine Ground Bone.....	58	29	12	1
13451	American Agricultural Chemical Co., New York, N. Y.	Pure Ground Bone.....	46	28	21	5
13464	Armour Fertilizer Works, Baltimore, Md.	Bone Meal.....	54	31	14	1
13430	Armour Fertilizer Works, Baltimore, Md.	Raw Bone Meal.....	26	30	35	9
13466	Baltimore Pulverizing Co., Baltimore, Md.	Pure Animal Raw Bone.....	60	21	12	1
13490	Baugh & Sons Co., Baltimore, Md.	Hopfenmaires' Bone.....	55	30	13	2
13471	Baugh & Sons Co., Baltimore, Md.	Raw Bone Meal.....	51	44	5	0
13660	Baugh & Sons Co., Baltimore, Md.	Raw Bone Meal.....	48	45	7	0
13699	Baugh & Sons Co., Baltimore, Md.	Raw Bone Meal.....	47	25	26	2
13684	Baugh & Sons Co., Baltimore, Md.	Raw Bone Meal.....	42	39	19	0
13537	The Berg Co., Philadelphia, Pa.	Raw Bone—Fine.....	34	33	23	10
13475	Chas. E. Bond, Spencerville, Md.	Pure Raw Bone.....	38	32	26	4
13477	The Bryant Fertilizer Co., Alexandria, Va.	Fine Ground Raw Bone.....	28	32	40	0
13546	Griffith & Boyd, Baltimore, Md.	Pure Fine Ground Bone Meal....	38	27	25	10
13879	Hanway, Barnes & McComas, Bel Air, Md.	H. & K. Ground Bone.....	62	26	11	1
13861	S. M. Hess & Bro., Philadelphia, Pa.	Ground Bone.....	34	46	19	1
13794	The Hubbard Fertilizer Co., Baltimore, Md.	Warranted Pure Raw Bone.....	11	44	43	2
13826	Lister's Agricultural Chemical Works, Newark, N. J.	Bone Meal.....	28	34	34	4
13888	Lister's Agricultural Chemical Works, Newark, N. J.	Celebrated Ground Bone.....	52	28	16	4
13827	Jos. Lister, Chicago, Ill.	Pure Bone Meal.....	51	28	20	1
13867	The D. B. Martin Co., Philadelphia, Pa.	Ground Bone.....	59	29	9	3
13955	The D. B. Martin Co., Philadelphia, Pa.	Raw Bone Meal.....	41	32	20	7
13743	Mayfield & Brown, Georgetown, D. C.	Pure Ground Bone.....	62	27	10	1
13832	The Miller Fertilizer Co., Baltimore, Md.	Ground Bone.....	54	24	18	4
13835	G. Ober & Sons Co., Baltimore, Md.	Pure Bone Meal.....	61	27	11	1
13959	G. Ober & Sons Co., Baltimore, Md.	Pure Raw Bone Meal.....	27	38	34	1
13964	The Patapasco Guano Co., Baltimore, Md.	Pure Ground Bone.....	30	33	33	4
13798	The Piedmont-Mt. Airy Guano Co., Baltimore, Md.	Raw Bone Meal.....	50	31	17	2
13783	The Southern Fertilizer Co., York, Pa.	Pure Ground Bone.....	48	27	17	8
13806	The Tuscarora Fertilizer Co., Baltimore, Md.	Animal Bone.....	54	31	14	1
13807	The Tuscarora Fertilizer Co., Baltimore, Md.	Raw Bone Meal.....	27	29	32	12
13931	Harry W. Whistler, Fountain Green, Md.	Bone Meal.....	64	23	12	1
13934	O. M. Whitaker, Reckord, Md.	Fine Ground Raw Bone.....	27	20	19	43
13942	The Robt. A. Woolridge Co., Baltimore, Md.	Pure Raw Bone.....	30	37	32	1

ADULTERATED PHOSPHATE.

It is not generally known that practically all of the acid phosphate ("Dissolved S. C. Rock," "Dissolved Tennessee Phosphate," "Dissolved Florida Phosphate," etc.) now sold to the farmers is adulterated. The reason for it is this: Some years ago when all of the rock phosphate came from South Carolina it was not possible to manufacture a fertilizer from it that could be safely guaranteed to run much over 14 per cent of available phosphoric acid. So 14 per cent available became the standard guarantee for high-grade acid phosphate. More recently, however, improved methods of manufacture, and especially the use of the higher grades of crude phosphate rock from Tennessee and Florida, have resulted in producing an acid phosphate with from 16 to 18 per cent of available phosphoric acid, averaging about 17 per cent. Prices, however, have become established on the 14 per cent basis and the manufacturer can not afford to give 17 per cent, equal to 340 pounds per ton, of available acid when the consumer is only willing to pay on a 14 per cent basis, or 280 pounds per ton, especially as the manufacturer buys his ingredients by analysis and pays for all he gets. The manufacturer can not afford to quarrel with his customer because the latter wants "cheap" goods; it is so easy to accommodate him. The ashes are to be removed. Two- or three hundred pounds of ashes in each ton of phosphate will reduce it to the required standard. Nice way to get rid of the ashes! Sell them to the farmer at \$10 per ton! But is this real economy for the farmer? What is the remedy? It is with the farmer himself. If he demands a higher grade he can get it, but he must expect to pay a little higher price.

If 14 per cent phosphate cost \$10 per ton it is at the rate of about 71 cents "per unit," that is 71 cents for each per cent of available phosphoric acid present per ton. However, if the guarantee is raised to 16 per cent it will be found that the additional phosphoric acid can be obtained for a less amount than this, probably for 50 to 60 cents per unit, or \$1 to \$1.20 per ton more than the price of the 14 per cent goods.

WANTED :—SOME BACK NUMBERS AT \$1 EACH.

In order to make up a few complete sets of the "M. A. C. Quarterly" to date, we need some back numbers, for which we will pay as follows:—

One dollar each for the first five copies of No. 13 offered.

One-half dollar each for the second five copies of No. 13.

One-half dollar each for the first five copies of No. 11.

One-quarter dollar each for the second five copies of No. 11.

One-quarter dollar each for the first five copies of Nos. 3, 7 and 9.

Address,

CHEMICAL DEPARTMENT,

Maryland Agricultural College,

COLLEGE PARK, MD.

Publications of the Chemical Department of the Maryland Agricultural College.

For some years the work of this Department was published as Bulletins of the Experiment Station. Afterward as the "Maryland Agricultural College Quarterly." The complete list is given below. Those marked with a star (*) are out of print.

Issued as Bulletins by the Experiment Station:

- *Special Bulletin—(No Number)—October, 1890.
Inspection and Analysis of Commercial Fertilizers.
- *Special Bulletin—D—February, 1891.
Inspection and Analysis of Commercial Fertilizers.
- *Special Bulletin—E—August, 1891.
Inspection and Analysis of Commercial Fertilizers.
- *Special Bulletin—G—February, 1892.
Inspection and Analysis of Commercial Fertilizers.
- *Special Bulletin—I—August, 1892.
Inspection and Analysis of Commercial Fertilizers.
- *Special Bulletin—J—February, 1893.
Inspection and Analysis of Commercial Fertilizers.
- *Special Bulletin—K—June, 1893.
Inspection and Analysis of Commercial Fertilizers.
- *Bulletin No. 24, Special Issue, February, 1894.
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—Appendix: Tables for Calculating Fertilizer Analysis and Valuations.
- *Bulletin No. 34, Special Issue, July, 1895.
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- *Bulletin No. 52, Special Issue, February, 1899.
Inspection and Analysis of Commercial Fertilizers—Plans of the New Chemical Laboratory.

Since February, 1898, the Chemical Department of the College has published the results of its inspection work as the "Maryland Agricultural College Quarterly:"

- Quarterly No. 1, August, 1898.
Analysis of Commercial Fertilizers — Supplementary List of Licensed Brands of Fertilizers — Sliding Scale and Irregular Guarantees — Letter to the Farmers of the State.
- Quarterly No. 2, November, 1898.
Nature Studies—"Natural Plant Food."
- *Quarterly No. 3, February, 1899.
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- Quarterly No. 4, May, 1899.
"Gas, Oyster Shell and Stone Lime."—Table of Analysis of Gas Oyster Shell and Stone Lime.
- Quarterly No. 5, August, 1899.
Analysis of Commercial Fertilizers.
- Quarterly No. 6, November, 1899.
"Testing Seeds."—Questions and Answers.

- *Quarterly No. 7, February, 1900.
Schedule of Valuations—Composition of Fertilizing Materials—Composition of Farm Manures—Fertilizing Constituents of Feeding Stuffs and Farm Products, etc.—Time for Exhaustion of Fertilizers—Fertilizing Materials Contained in Crops Grown on One Acre—Commercial Fertilizer Statistics—Composition of Plants—Fertilizing Materials—Analysis of Commercial Fertilizers—Arithmetic of Fertilizers—Home Mixing of Fertilizers—Soil Analysis—Analysis of Plants—Prices of Fertilizers.
- Quarterly No. 8, May, 1900.
Explanation of Terms Used in Food Analysis—Uses of Food—Compounding Rations—Table of Feeding Standards—Average Composition of Feeding Stuffs—Analysis of Feeding Stuffs at the College—The Feed Stuff Law—Information Concerning the Chemical Department.
- *Quarterly No. 9, August, 1900.
Analysis of Commercial Fertilizers.
- *Quarterly No. 10, November, 1900.
Feed Stuff Inspection—Analysis of Butter and Oleomargarine—Comparative Analysis of Coal Gas and Water Gas Lime—Analysis of Oyster Shells and Shell Lime—Humbbug Fertilizer.
- *Quarterly No. 11, February, 1901.
Analysis of Commercial Fertilizers—Notes and Correspondence.
- *Quarterly No. 12, May, 1901.
Composition of Standard Feed Stuffs—Dairy Rations—Analysis of Feed Stuffs—Analysis of "Black Death," "Exterminator," and "Fruit Tree Wash"—Utility of Condimental Foods and Condition Powders—Feed Stuff Law of Maryland.
- *Quarterly No. 13, August, 1901.
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- Quarterly No. 14, November, 1901.
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- Quarterly No. 15, February, 1902.
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- Quarterly No. 16, May, 1902.
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- Quarterly No. 17, August, 1902.
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- Quarterly No. 18, November, 1902.
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- Quarterly No. 19, February, 1903.
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- Quarterly No. 20, May, 1903.
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- Quarterly No. 21, August, 1903.
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- Quarterly No. 22, November, 1903.
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- *Quarterly No. 23, February, 1904.
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- Quarterly No. 24, May, 1904.
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Supplement:
Conversion Tables for Calculating Fertilizer and Feed Stuff Analysis.
- Quarterly No. 25, August, 1904.
Analysis of Commercial Fertilizers.
- Quarterly No. 26, February, 1904.
Results of Seed Testing.
- Quarterly No. 27, February, 1905.
Analysis of Commercial Fertilizers—Adulterated Phosphate.

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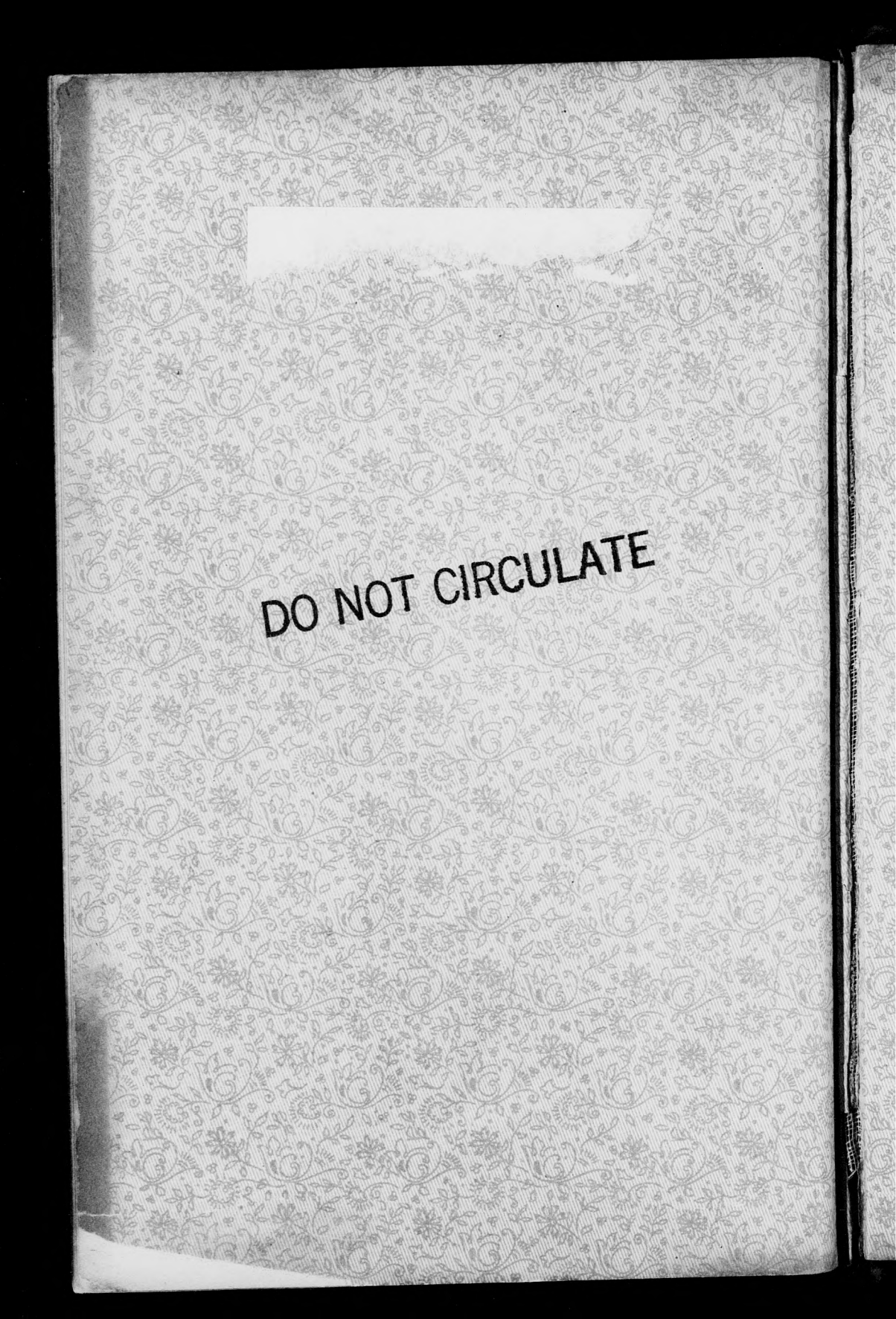
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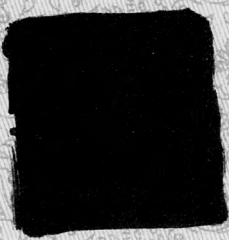
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